DOCUMENT RESUME

ED 111 949 CE 004 669

TITLE	Job Briefs. Career Education Guide.
INSTITUTION	Dependents Schools (DOD), Washington, D.C. European Area.
REPORT NO	USDESEA-Man-352-356-7
PUB DATE	1 May 74
NOTE	311p.; For related documents, see CE 004 659-660 and CE 004 662-668
EDRS PRICE	MF-$0.76 HC-$15.86 Plus Postage
DESCRIPTORS	*Career Education; Career Opportunities; Employment Qualifications; Entry Workers; Guides; Job Market; *Occupational Clusters; Occupational Guidance; *Occupational Information

ABSTRACT

The document contains 288 one-page job descriptions based on 1973 information for the following 11 career clusters: automotive technology, business/clerical/sales, computer technology, electricity/electronics, graphic communications, health/cosmetology, agriculture/conservation, artistic/literary/music, mechanical/transportation/construction, scientific/mathematics/medicine, and social/personal services. Each job brief consists of a brief job description, a list of related occupations, job related high school subjects, and additional information related to educational requirements, work experience requirements, career ladders, and beginning salaries. (BP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED111949

CE 004 669

USDESEA Man 352-356-7

Career Education Guide

JOB BRIEFS

UNITED STATES DEPENDENTS SCHOOLS
EUROPEAN AREA

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

DEPARTMENT OF THE ARMY
DIRECTORATE
UNITED STATES DEPENDENTS SCHOOLS
EUROPEAN AREA
APO 09164

MANUAL,
No. 352-356-7

1 May 1974

EDUCATION

Career Education - JOB BRIEFS

This Career Education guide is an official publication of the Directorate, United States Dependents Schools, European Area. It is designed to serve as a tool for career counseling. The principal will establish adequate accountability procedures for all copies issued.

FOR THE DIRECTOR:

OFFICIAL:

RICHARD H. COSS
Deputy Director

S. J. Miceli
SAMUEL J. MICELI
Administrative Officer

DISTRIBUTION: As directed

JOB BRIEFS

This book contains almost 300 one-page job descriptions. They cover every major career area and will give you a good picture of the world of work and how you might fit into it.

Career Clusters: The jobs are organized into eleven career clusters. The first six correspond to USDESEA's six major areas. The other five cover the remainder of the career fields.

Job Titles: Although most job titles used are the same as those in the Dictionary of Occupational Titles (D.O.T.), some have been changed to more common terms. Jobs are listed alphabetically in the main index so that you can tell which cluster they are located in. At the front of each cluster is a cluster index.

Using This Guide:

1. Find the jobs which interest you, using the main index or the cluster index.
2. If you need more information than the job brief gives, look up the job in the *D.O.T.* or *The Occupational Outlook Handbook*.
3. If you want a personal copy of any of the job descriptions, remove the job brief, copy it on a photo-copy machine, and *immediately return the original to this book*.

Other Aids: These same jobs are also found in the Job Sort Cards. You may wish to use that system to find a number of jobs that might be attractive to you. You may also wish to use Job-O or some similar job interest test to help you match your interests to the right career cluster(s).

INDEX TO CAREER CLUSTERS

LEGEND

Automotive Technology	AT
Business/Clerical/Sales	B/C/S
Computer Technology	CT
Electricity/Electronics	E/E
Graphic Communications	GC
Health/Cosmetology	H/C
Agriculture/Conservation	A/C
Artistic/Literary/Music	A/L/M
Mechanical/Transportation/Construction	M/T/C
Scientific/Mathematics/Medicine	S/M/M
Social/Personal Services	S/P

	Cluster
ACCOUNTANT (Certified Public)	B/C/S
ACCOUNTING CLERK	B/C/S
ADMINISTRATIVE AIDE	B/C/S
ADMITTING CLERK (Hospital)	H/C
ADVERTISING SALESPERSON	B/C/S
AIR CONDITIONING AND REFRIGERATION MECHANIC	E/E
AIR FREIGHT AGENT	B/C/S
AIRLINE PILOT/COPILOT	S/M/M
AIRLINE STEWARDESS/STEWARD	S/P
AIRPLANE MECHANIC	M/T/C
AIR TRAFFIC CONTROLLER	M/T/C
AMBULANCE DRIVER	S/M/M
ANIMAL KEEPER	S/M/M
ARCHITECT	A/L/M
ARC WELDER	AT
ARTIST, see COMMERCIAL ARTIST	A/L/M
ATTORNEY, see LAWYER	S/P
AUDIOVISUAL, SPECIALIST (Education)	M/T/C

INDEX TO CAREER CLUSTERS

	Clusters
AUDIT CLERK	B/C/S
AUTOMOBILE AIR CONDITIONING MECHANIC	AT
AUTOMOBILE BODY REPAIRMAN, TRAINEE	AT
AUTOMOBILE MECHANIC	AT
AUTOMOBILE MECHANIC HELPER	AT
AUTOMOBILE MUFFLER INSTALLER	AT
AUTOMOBILE PAINTER, TRAINEE	AT
AUTOMOBILE PARTS MAN, see AUTOMOTIVE COUNTERMAN	AT
AUTOMOBILE TRANSMISSION SPECIALIST, TRAINEE	AT
AUTOMOBILE UPHOLSTERER	AT
AUTOMOTIVE COUNTERMAN	AT
AUTOMOTIVE ENGINEER	AT
AUTOMOTIVE TUNE-UP REPAIRMAN	AT
BALLET DANCER, see DANCER	A/L/M
BANK CLERK	B/C/S
BANK OPERATIONS TRAINEE	B/C/S
BANK TELLER	B/C/S
BARBER	H/C
BEAUTICIAN, see COSMETOLOGIST, TRAINEE	H/C
BILLING CLERK	B/C/S
BILLING MACHINE OPERATOR	B/C/S
BINDERY WORKER	GC
BIOLOGICAL SCIENTIST	S/M/M
BLUEPRINTING MACHINE OPERATOR	GC
BOOKKEEPER	B/C/S
BOOKKEEPING MACHINE OPERATOR	B/C/S
BOX BOY, see COURTESY CLERK	S/P
BRAKE REPAIRMAN	AT

INDEX TO CAREER CLUSTERS

	Cluster
BRAZER, ASSEMBLER	AT
BUS DRIVER	M/T/C
BUTCHER, see MEAT CUTTER (Retail)	M/T/C
BUYER (Retail Trade; Wholesale Trade)	B/C/S
CABLE SPLICER HELPER	E/E
CALCULATING MACHINE OPERATOR	B/C/S
CAMERAMAN	A/L/M
CARD/TAPE CONVERTER OPERATOR	CT
CARPENTER	M/T/C
CASHIER	B/C/S
CATALOG ORDER CLERK	B/C/S
CPA, see ACCOUNTANT (Certified Public)	B/C/S
CHILD CARE WORKER	S/P
CITY PLANNING AIDE, see PLANNING AIDE	S/P
CIVIL SERVICE APPRENTICE	M/T/C
CLERGYMAN	S/P
CLERK-TYPIST	B/C/S
CLOTHES DESIGNER, see FASHION DESIGNER	A/L/M
COIN-VENDING MACHINE MECHANIC	M/T/C
COLLECTION CLERK	B/C/S
COLLEGE INSTRUCTOR	S/P
COMBINATION WELDER	AT
COMMERCIAL ARTIST	A/L/M
COMMUNICATION MAN (Electronics)	E/E
COMPOSITOR, see TYPESETTING MACHINE OPERATOR	GC
COMPUTER INPUT-OUTPUT CONTROL CLERK	CT
COMPUTER OPERATOR, TRAINEE	CT
COMPUTER-PERIPHERAL EQUIPMENT OPERATOR, TRAINEE	CT

INDEX TO CAREER CLUSTERS

	Cluster
CONTROL PANEL ASSEMBLER, see EQUIPMENT INSTALLER	E/E
CONTROL ROOM TECHNICIAN (Radio and Television)	M/T/C
COOK/CHEF	S/P
COPY READER	GC
COPYWRITER	GC
COSMETOLOGIST, TRAINEE	H/C
COUNSELOR (School)	S/P
COUNTERCLERK (Cleaning and Laundry)	S/P
COURTESY CLERK (Box Boy)	S/P
COURT REPORTER	B/C/S
CREDIT CLERK	B/C/S
CREDIT MANAGER	B/C/S
CUSTODIAN	S/P
DANCER	A/L/M
DARKROOM TECHNICIAN	GC
DATA PROCESSING EQUIPMENT TECHNICIAN	CT
DATA TYPIST	CT
DEMONSTRATOR	H/C
DENTAL ASSISTANT	H/C
DENTAL HYGIENIST, TRAINEE	H/C
DENTAL LABORATORY TECHNICIAN, TRAINEE	H/C
DENTIST	H/C
DEPUTY, see POLICEMAN	S/P
DIESEL MECHANIC	AT
DIETITIAN	H/C
DISC JOCKEY, see RADIO AND TELEVISION ANNOUNCER	A/L/M
DISPLAYPERSON	A/L/M
DOCTOR, see PHYSICIAN	H/C

INDEX TO CAREER CLUSTERS

	Cluster
DOMESTIC SERVICE WORKER	S/P
DRAFTSMAN, TRAINEE	GC
DUPLICATING MACHINE OPERATOR	GC
ELECTRIC MOTOR-CONTROL ASSEMBLER, see EQUIPMENT INSTALLER	E/E
ELECTRIC-MOTOR REPAIRMAN	E/E
ELECTRIC TOOL REPAIRMAN, see ELECTRICAL REPAIRMAN	E/E
ELECTRICAL-APPLIANCE REPAIRMAN, TRAINEE	E/E
ELECTRICAL-APPLIANCE SERVICEMAN, TRAINEE	E/E
ELECTRICAL ENGINEER	E/E
ELECTRICAL REPAIRMAN	E/E
ELECTRICIAN HELPER (Construction)	E/E
ELECTROCARDIOGRAPH (EKG) TECHNICIAN, TRAINEE	H/C
ELECTROENCEPHALOGRAPH (EEG) TECHNICIAN	H/C
ELECTRONIC TECHNICIAN	E/E
ELECTRONICS ASSEMBLER	E/E
ELECTRONICS ENGINEER, see ELECTRICAL ENGINEER	E/E
ELECTRONICS MECHANIC HELPER (Computer)	E/E
ELEMENTARY SCHOOL TEACHER	S/P
EMPLOYMENT CLERK, see PERSONNEL CLERK	S/P
ENGINEER, see ELECTRICAL ENGINEER	E/E
ENGINEERING TECHNICIAN see MECHANICAL-ENGINEERING TECHNICIAN	M/T/C
EQUIPMENT INSTALLER	E/E
FARM HAND (General)	A/C
FASHION DESIGNER	A/L/M
FILE CLERK	B/C/S
FIREMAN	M/T/C
FLAME CUTTER, HAND	AT

INDEX TO CAREER CLUSTERS

	Cluster
FOOD CLERK (Grocery Checker)	B/C/S
FORESTER	A/C
FORESTRY AIDE	A/C
FRONT OFFICE CLERK (Hotel)	S/P
FURNACE INSTALLER AND REPAIRMAN	E/E
FURNITURE SALESPERSON	B/C/S
GASOLINE ENGINE REPAIRMAN	AT
GAS WELDER	AT
GROUNDSMAN	A/C
HAIRDRESSER, see COSMETOLOGIST	H/C
HEATING MECHANIC see FURNACE INSTALLER AND REPAIRMAN	E/E
HOME ATTENDANT	H/C
HOME ECONOMIST	S/P
HOSPITAL MAID	H/C
HOSPITAL PORTER	H/C
HOTEL CLERK, see FRONT OFFICE CLERK (Hotel)	S/P
HOTEL MANAGER	S/P
HOUSEHOLD-APPLIANCE INSTALLATION MAN HELPER	E/E
HOUSEHOLD WORKER, see DOMESTIC SERVICE WORKER	S/P
HOUSE PAINTER see PAINTER (Construction and Maintenance)	M/T/C
ILLUSTRATOR, TRAINEE	GC
INHALATION THERAPIST, TRAINEE	H/C
INSTRUMENT REPAIRMAN HELPER	E/E
INSURANCE AGENT	B/C/S
INSURANCE CLERK (Medical)	B/C/S
INTERIOR DESIGNER/DECORATOR	A/L/M
IRONWORKER (Structural and Ornamental)	M/T/C

INDEX TO CAREER CLUSTERS

	Cluster
JEWELER	A/L/M
JOB PRINTER, TRAINEE	GC
JOURNALIST, see REPORTER	A/L/M
JUNIOR FEDERAL ASSISTANT	B/C/S
JUVENILE OFFICER, see POLICEWOMAN	S/P
POLICEMAN	S/P
PROBATION OFFICER	S/P
KEYPUNCH OPERATOR	B/C/S
LABORATORY TECHNICIAN	S/M/M
LAWYER	S/P
LEGAL SECRETARY	B/C/S
LIBRARIAN	S/P
LIBRARY ASSISTANT	S/P
LICENSED VOCATIONAL NURSE	H/C
LIFE SCIENTIST, see BIOLOGICAL SCIENTIST	S/M/M
LINEMAN	E/E
LINOTYPE OPERATOR	GC
LITERARY WRITER, see REPORTER	A/L/M
LITHOGRAPHER	GC
LITHOGRAPHIC CAMERAMAN	GC
LITHOGRAPHIC (OFFSET) PRESSMAN	GC
LVN, see LICENSED VOCATIONAL NURSE	H/C
MACHINIST	M/T/C
MAGNETIC TAPE TYPIST, see TECHNICAL TYPIST	B/C/S
MAID, GENERAL, see DOMESTIC SERVICE WORKER	S/P
MAIL CARRIER	S/P
MAINTENANCE MAN	M/T/C
MAINTENANCE MECHANIC (Industrial)	M/T/C
MANICURIST, TRAINEE	H/C

INDEX TO CAREER CLUSTERS

	Cluster
MANUFACTURERS' REPRESENTATIVE	B/C/S
MATHEMATICIAN	S/M/M
MATRON, see POLICEWOMAN	S/P
MEAT CUTTER (Retail)	M/T/C
MECHANICAL-ENGINEERING TECHNICIAN	M/T/C
MEDICAL ASSISTANT, TRAINEE	H/C
MEDICAL LABORATORY ASSISTANT, TRAINEE	H/C
MEDICAL-RECORD CLERK	H/C
MEDICAL RECORD LIBRARIAN	H/C
MEDICAL SECRETARY, see SECRETARY (General)	B/C/S
MEDICAL STENOGRAPHER, see STENOGRAPHER	B/C/S
MEDICAL TECHNOLOGIST	H/C
MIMEOGRAPH OPERATOR, see DUPLICATING MACHINE OPERATOR	GC
MODEL	A/L/M
MOTORCYCLE REPAIRMAN, TRAINEE	AT
MULTILITH OPERATOR	GC
MUSICIAN, (Instrumental)	A/L/M
NEW CAR GET-READY MAN	AT
NEWSPAPER REPORTER, see REPORTER	A/L/M
NURSE, see REGISTERED NURSE	H/C
NURSE'S AIDE	H/C
NUTRITIONIST, see DIETITIAN	H/C
OCEANOGRAPHER	S/M/M
OCCUPATIONAL THERAPIST	S/M/M
OFFICE CLERK (General)	B/C/S
OFFICE MACHINE SALESMAN	B/C/S
OFFICE MACHINE SERVICEMAN, TRAINEE	E/E
OPERATING ENGINEER	M/T/C
OPTICAL BENCHMAN	S/M/M

INDEX TO CAREER CLUSTERS

	Cluster
OPTOMETRIST	S/M/M
ORDERLY (Hospital)	H/C
OUTBOARD-MOTOR MECHANIC	AT
PAINTER (Construction and Maintenance)	M/T/C
PBX OPERATOR	B/C/S
PEACE CORPS VOLUNTEER	S/P
PEACE OFFICER, see POLICEMAN	S/P
PERSONNEL CLERK	S/P
PHARMACY HELPER	H/C
PHOTOENGRAVER	GC
PHOTOGRAPHER, TRAINEE	GC
PHYSICAL THERAPIST	H/C
PHYSICAL THERAPY ASSISTANT, TRAINEE	H/C
PHYSICIAN	H/C
PHYSICIST	S/M/M
PLANNING AIDE	S/P
PLASTICS FABRICATOR OPERATOR	M/T/C
PLUMBER	M/T/C
POLICEMAN	S/P
POLICEWOMAN	S/P
POST OFFICE CLERK	B/C/S
POWER TRUCK OPERATOR	M/T/C
PRINTING PRESSMAN	GC
PROBATION OFFICER	S/P
PROCESS ARTIST, TRAINEE (Printing and Publishing)	GC
PRODUCER-DIRECTOR (Radio and Television)	A/L/M
PROGRAMMER, TRAINEE	CT
PROOF MACHINE OPERATOR	B/C/S

INDEX TO CAREER CLUSTERS

	Cluster
PROOF PRESSMAN	GC
PROSTHETIST-ORTHOTIST	S/M/M
PSYCHIATRIC TECHNICIAN	H/C
PSYCHOLOGIST (Clinical or School)	S/P
PUBLIC RELATIONS WORKER	B/C/S
PURCHASING AGENT	B/C/S
RADIO AND TELEVISION ANNOUNCER	A/L/M
RADIO ENGINEER (Radio and Television Broadcasting)	E/E
RADIO MECHANIC, TRAINEE (Airplane)	E/E
RADIO OPERATOR (Dispatcher)	M/T/C
RADIO OPERATOR (Ground)	M/T/C
RADIO REPAIRMAN, TRAINEE	E/E
RADIOLOGIC TECHNOLOGIST (X-ray Technician)	H/C
REAL ESTATE AGENT	B/C/S
RECEPTIONIST	B/C/S
RECREATION WORKER	S/P
REGISTERED NURSE	H/C
REPORTER	A/L/M
SALES CLERK (General)	B/C/S
SALESMAN/DRIVER (Routeman)	B/C/S
SCRIPT WRITER (Continuity Writer)	A/L/M
SECONDARY SCHOOL TEACHER	S/P
SECRETARY (General)	B/C/S
SECURITIES AGENT	B/C/S
SERVICE STATION ATTENDANT	AT
SHERIFF, see POLICEMAN	S/P
SHIPPING AND RECEIVING CLERK	B/C/S
SIGN PAINTER	A/L/M

INDEX TO CAREER CLUSTERS

	Cluster
SILK-SCREEN PRINTER	GC
SINGER	A/L/M
SMALL ENGINE REPAIRMAN see GASOLINE ENGINE REPAIRMAN	AT
SOCIAL SCIENTIST, see SOCIOLOGIST	S/P
SOCIAL WORKER	S/P
SOCIOLOGIST	S/P
SOLDERER (PRODUCTION LINE)	E/E
STATION PROGRAM DIRECTOR	A/L/M
STATIONARY ENGINEER	M/T/C
STENOGRAPHER	B/C/S
STOCKBROKER, see SECURITIES AGENT	B/C/S
STOCK CLERK	B/C/S
STRIPPER, TRAINEE	GC
SURGICAL TECHNICIAN	H/C
SURVEYOR	S/M/M
SWITCHBOARD OPERATOR, see PBX OPERATOR	B/C/S
SYSTEMS ANALYST TRAINEE (Business-Electronic Data Processing)	CT
SYSTEMS PROGRAMMER, TRAINEE	CT
TABULATING MACHINE OPERATOR	CT
TAPE LIBRARIAN	CT
TAPE PERFORATOR	GC
TEACHER, see ELEMENTARY SCHOOL TEACHER	S/P
SECONDARY SCHOOL TEACHER	S/P
COLLEGE INSTRUCTOR	S/P
TECHNICAL DIRECTOR (Radio and Television Broadcasting)	S/M/M
TECHNICAL ILLUSTRATOR, TRAINEE	GC
TECHNICAL TYPIST	B/C/S

INDEX TO CAREER CLUSTERS

	Cluster
TECHNICAL WRITER	S/M/M
TELEGRAPHIC-TYPEWRITER OPERATOR	B/C/S
TELEPHONE INDUSTRY FRAMEMAN	E/E
TELEPHONE OPERATOR	B/C/S
TELEPHONE REPAIRMAN see TELEPHONE STATION INSTALLER	E/E
TELEPHONE SERVICE REPRESENTATIVE	B/C/S
TELEPHONE STATION INSTALLER	E/E
TELETYPE OPERATOR see TELEGRAPHIC-TYPEWRITER OPERATOR	B/C/S
TELEVISION REPAIRMAN, TRAINEE	E/E
TELLER, see BANK TELLER	B/C/S
TESTER, ELECTRONIC SYSTEMS	E/E
TIRE RECAPPER	AT
TIRE SERVICEMAN	AT
TOOL ROOM ATTENDANT	M/T/C
TRAFFIC ENGINEERING AIDE	M/T/C
TRANSCRIBING MACHINE OPERATOR	B/C/S
TRUCK DRIVER (Local)	M/T/C
TRUCK DRIVER (Long Haul)	M/T/C
TYPIST, see CLERK-TYPIST	B/C/S
TYPESETTING MACHINE OPERATOR	GC
UNITED STATES AIR FORCE	S/P
UNITED STATES ARMY	S/P
UNITED STATES COAST GUARD	S/P
UNITED STATES MARINE CORPS	S/P
UNITED STATES NAVY	S/P
URBAN PLANNER	S/P
URBAN PLANNING AIDE, see PLANNING AIDE	S/P

INDEX TO CAREER CLUSTERS

	Cluster
VETERINARIAN	S/M/M
VETERINARIAN ATTENDANT, see ANIMAL KEEPER	S/M/M
VISTA VOLUNTEER	S/P
WAITER/WAITRESS	S/P
WARD CLERK	H/C
WAREHOUSEMAN	B/C/S
WELDER	M/T/C, AT
WELDER HELPER	AT
WHOLESALE SALESMAN (General Merchandise)	B/C/S
WIG DRESSER	H/C
WOMEN IN THE ARMED FORCES	S/P
X-RAY TECHNICIAN, see RADIOLOGIC TECHNOLOGIST	H/C
ZOOKEEPER, see ANIMAL KEEPER	S/M/M

INDEX

AUTOMOTIVE TECHNOLOGY

Page

ARC WELDER 1
AUTOMOBILE AIR CONDITIONING MECHANIC 2
AUTOMOBILE BODY REPAIRMAN, TRAINEE 3
AUTOMOBILE MECHANIC 4
AUTOMOBILE MECHANIC HELPER 5
AUTOMOBILE MUFFLER INSTALLER 6
AUTOMOBILE PAINTER, TRAINEE 7
AUTOMOBILE PARTS MAN, see AUTOMOTIVE COUNTERMAN . . . . .
AUTOMOBILE TRANSMISSION SPECIALIST, TRAINEE 8
AUTOMOBILE UPHOLSTERER 9
AUTOMOTIVE COUNTERMAN 10
AUTOMOTIVE ENGINEER 11
AUTOMOTIVE TUNE-UP REPAIRMAN 12
BRAKE REPAIRMAN 13
BRAZER, ASSEMBLER 14
COMBINATION WELDER 15
DIESEL MECHANIC 16
FLAME CUTTER, HAND 17
GASOLINE ENGINE REPAIRMAN 18
GAS WELDER 19
MOTORCYCLE REPAIRMAN, TRAINEE 20
NEW CAR GET-READY MAN 21
OUTBOARD-MOTOR MECHANIC 22
SERVICE STATION ATTENDANT 23
SMALL ENGINE REPAIRMAN, see GASOLINE ENGINE REPAIRMAN . .
TIRE RECAPPER 24
TIRE SERVICEMAN 25
WELDER 26
WELDER HELPER 27

ARC WELDER

JOB BRIEF

D.O.T. No: 810.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

ARC WELDER: Arc Welders weld together metal parts as specified by layout, diagram, work order, or oral instructions, using electric arc welding equipment. In the arc welding process, the welder jumps an electric spark or arc between an electrode and the material being welded so that a "bead" of molten metal fuses the parts into a single piece.

RELATED OCCUPATIONS:

Combination Welder
Gas Welder
Automobile Muffler Installer
Automobile Body Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Welding
Shop Mathematics
Blueprint Reading

ADDITIONAL INFORMATION:

Generally several years of on-the-job training are required to become a skilled manual Arc Welder. Training for this job can be obtained from technical schools, community colleges, and high schools. An individual planning a career as an Arc Welder needs manual dexterity, good eyesight, and good hand-eye coordination. Salaries range from approximately $140 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

AUTOMOBILE AIR-CONDITIONING MECHANIC

JOB BRIEF

D.O.T. No: 620.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

AUTOMOBILE AIR-CONDITIONING MECHANIC: Automobile Air-Conditioning Mechanics install and repair automotive air-conditioning units.

RELATED OCCUPATIONS:

Automobile Mechanic Helper
Automobile Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Machine Shop
Metal Shop
Electricity
Basic Mathematics

ADDITIONAL INFORMATION:

Usually this is not an entry level position. Training as an automobile mechanic is generally a prerequisite to employment as an Automobile Air-conditioning Mechanic. Most employers provide on-the-job training usually consisting of supervision by a foreman or experienced Air-conditioning Mechanic. Employees are often required to attend air-conditioning clinics sponsored in large cities by major automobile manufacturing corporations. Opportunities for employment are good and are most plentiful in large urban areas. Salaries average $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

J O B   B R I E F

AUTOMOBILE BODY REPAIRMAN, TRAINEE

D.O.T. No: 807.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

AUTOMOBILE BODY REPAIRMAN: Automobile Body Repairmen are skilled metal craftsmen who repair damaged automobile bodies.

RELATED OCCUPATIONS:

- Automobile (New Car) Man
- Automobile Mechanic
- Service Mechanic
- Service Station Attendant
- Automotive Counterman

JOB RELATED HIGH SCHOOL SUBJECTS:

- Mechanical Drawing
- Automobile Shop
- Machine Shop
- Welding
- Metal Shop

ADDITIONAL INFORMATION:

This is a growing trade with many training programs available at the local community colleges and in regional occupational programs. It is an apprenticeable occupation in some states with the length of apprenticeship up to 4 years. A high school diploma is not required but may be helpful for future advancement in this field. Previous experience with automobiles either in schools or clubs, is considered valuable in obtaining employment. Starting salary is about $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AUTOMOBILE MECHANIC

JOB BRIEF

D.O.T. No: 620.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

AUTOMOBILE MECHANIC: Automobile Mechanics handle all phases of automobile repair or they may specialize in certain types. Automobile Mechanics are employed by new car agencies, repair garages, brake shops, automotive transmission shops, and some gasoline stations.

RELATED OCCUPATIONS:

Auto Body Repairman
Automobile (New Car) Get-Ready Man
Auto Counterman
Service Station Attendant
Truck Mechanic
Garage Service Man
Diesel Mechanic
Airline Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Auto Shop
Blueprint Reading
Basic Electricity
Auto Mechanics

ADDITIONAL INFORMATION:

This is an apprenticeable occupation through the Division of Apprenticeship Standards, with the length of apprenticeship being 4 years. A high school diploma or equivalent is helpful for entry into the apprentice program. The GATB* test is usually administered to all applicants through the state employment services. High school graduates with tool handling abilities and a basic knowledge of automobile operation can find employment in this occupation through a union shop and an official apprenticeship program. Many training programs are offered at the high schools and community college levels. Salaries start at $150 per week.

*General Aptitude Test Battery

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 620.884
D.O.T. Ref: Volume II, Page 322
Revision date: October 1973

THE JOB:

AUTOMOBILE MECHANIC HELPER: Automobile Mechanic Helpers assist Automobile Mechanics in repairing automobiles, buses, trucks, and other automotive vehicles. Automobile Mechanic Helpers remove and disassemble the unit to be repaired, such as an engine, transmission, or differential, using hand and power tools.

RELATED OCCUPATIONS:

Brake Adjuster
Construction Equipment Mechanic Helper
Clutch Rebuilder
Tractor Mechanic Helper
Automobile Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Shop
General Mathematics
Machine Shop
Industrial Arts

ADDITIONAL INFORMATION:

This is an entry level job. A high school diploma is not required but preferred for employment as an Automobile Mechanic Helper. Most Automobile Mechanic Helpers receive on-the-job training. With experience, a helper may advance to Automobile Mechanic. Opportunities are excellent, with the greatest number of jobs available in California, Texas, New York, Ohio, Pennsylvania, Illinois, Michigan, Florida, and New Jersey. Salary is based on hourly wages--generally about $80 to $90 per week average.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AUTOMOBILE MUFFLER INSTALLER

JOB BRIEF

D.O.T. No: 807.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

AUTOMOBILE MUFFLER INSTALLER: Automobile Muffler Installers replace defective mufflers, resonators and exhaust pipes on cars and buses. They remove defective mufflers with hacksaws, wrenches, and acetylene torches, select a replacement muffler, and fasten the new muffler in place.

RELATED OCCUPATIONS:

Automobile Service Mechanic
Automobile Mechanic
Automobile Mechanic Helper

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Machine Shop
Industrial Arts
Welding
Metal Shop

ADDITIONAL INFORMATION:

High school graduation is usually required and experience working with automobiles is desired. Upon employment, on-the-job training is usually provided by the employer. Employment opportunities are limited but most numerous in large urban areas. Specialized installers are paid a salary plus commission for sales. Average salaries are about $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AUTOMOBILE PAINTER, TRAINEE

JOB BRIEF

D.O.T. No: 845.781

D.O.T. Ref: Volume II, Page 319

Revision date: October 1973

THE JOB:

AUTOMOBILE PAINTER: Automobile Painters paint vehicles such as automobiles, buses, and trucks. They may remove old paint from damaged or the repaired portion of vehicles, using sanders, liquid removers, and scrapers; cover and/or tape all bumpers, windows, and chrome; mix specified paints; and repaint vehicle or part with a spray gun and/or brush.

RELATED OCCUPATIONS:

Aircraft Painter

JOB RELATED HIGH SCHOOL SUBJECTS:

General Industrial Arts
Automotive Painting
Shop Mathematics

ADDITIONAL INFORMATION:

Completion of high school is generally not a requirement but is an advantage in getting a job. Most Automobile Painters start as automobile painter helpers and acquire their skills informally by working for several years with experienced painters. Training can also be obtained through apprenticeships, which generally last 3 years, or specialized programs at technical schools or regional occupational centers. People considering this occupation should have good health, a discerning color sense, and a steady hand. Employment of Automobile Painters is expected to increase moderately through the '70s. Salaries range from $150 to $242 per week, depending on geographical location.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

AUTOMOBILE TRANSMISSION SPECIALIST,
TRAINEE

D.O.T. No: 620.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

AUTOMOBILE TRANSMISSION SPECIALIST: Automobile Transmission Specialists repair transmissions in cars, trucks, buses, and other vehicles, using a variety of hand tools, power tools, and machines. Automobile Transmission Specialists may be assigned specialized tasks according to experience and training, such as cleaning, removal and replacement, or transmission rebuilding.

RELATED OCCUPATIONS:

Motocycle Repairman
Automobile Tune-up Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Shop
Machine Shop
General Mathematics
Industrial Arts

ADDITIONAL INFORMATION:

High school graduation is generally required. Some employers desire some community college training. Most employers provide some on-the-job supervised training for new employees. To become a transmission rebuilder, an Automobile Transmission Specialist must have at least 5 years of work experience in transmission repair. Opportunities are good and expected to increase. Starting salaries for Automobile Transmission Specialists range from $80 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

AUTOMOBILE UPHOLSTERER
D.O.T. No: 780.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

AUTOMOBILE UPHOLSTERER: Automobile Upholsterers repair or replace upholstery in automobiles, trucks, buses, motorcycles and boats. Automobile Upholsterers remove old upholstery including carpeting, seat covers, padding, and door panels. They repair or replace the upholstery using a variety of hand and machine tools. They also repair and replace convertible tops.

RELATED OCCUPATIONS:

Furniture Upholsterer

JOB RELATED HIGH SCHOOL SUBJECTS:

Sewing
Upholstery
Machine Shop

ADDITIONAL INFORMATION:

A high school diploma or equivalent is preferred, and a 3 to 5 year apprenticeship is required by many upholstery shops. Courses in upholstering are offered at community colleges and private technical schools. These courses are helpful and may shorten the apprenticeship period. Opportunities for employment are good, particularly in large urban areas. Automobile Upholsterer apprentices usually begin at $80 to $90 per week for 40 hours.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

AUTOMOTIVE COUNTERMAN

JOB BRIEF

D.O.T. No: 289.358

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

AUTOMOTIVE COUNTERMAN: Automotive Countermen dispense parts and accessories over the counter or take orders by telephone in a retail or wholesale auto parts store or in the parts department of an automobile agency or automobile wrecking firm.

RELATED OCCUPATIONS:

Sales Clerk
Salesperson
Service Station Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Shop
Business Mathematics
Bookkeeping
Typing
Auto Mechanics

ADDITIONAL INFORMATION:

There are no set educational requirements for entry into this field. A high school education is expected by many employers, however. Community college or vocational school training is also helpful for advancement within the field. Automotive Counterman is a steadily growing occupation. There are few training programs for this job. Automotive technology courses are helpful although much of the job can only be learned in an automotive parts department while on the job. Starting salary is about $80 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AUTOMOTIVE ENGINEER

JOB BRIEF

D.O.T. No: 007.081

D.O.T. Ref: Volume II, Page 371

Revision date: October 1973

THE JOB:

AUTOMOTIVE ENGINEER: Automotive Engineers design and test the performance of automobiles, trucks, and other automotive equipment. They design both the chassis and the motor, conducting cost analysis studies to produce the most economical product.

RELATED OCCUPATIONS:

Mechanical Engineer
Electrical Engineer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Auto Shop

ADDITIONAL INFORMATION:

A bachelor's degree in automotive engineering is the educational requirement for entrance into the automotive engineering career field. Engineering graduates usually start work as assistants to experienced engineers. As the new employees gain experience they advance to positions of greater responsibility. Prospective engineers should be able to work as a member of a team, have an analytical mind and a capacity for detail. Starting salaries average about $230 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AUTOMOTIVE TUNE-UP REPAIRMAN

JOB BRIEF

D.O.T. No: 620.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

AUTOMOTIVE TUNE-UP REPAIRMAN: Automotive Tune-up Repairmen, also known as Auto Service Mechanics, perform minor repairs and tune-ups on motor vehicles. They check, tune, repair or replace spark plugs, distributors, timing mechanisms, valves, fuel pumps and other such units using a variety of hand and power tools.

RELATED OCCUPATIONS:

Automobile Mechanic Helper
Automobile Mechanic
Service Station Attendant

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Shop
Welding
Machine Shop
Metal Shop
Industrial Arts

ADDITIONAL INFORMATION:

Although high school graduation is not a requirement, most employers prefer it. Most employers supply some on-the-job training. No special pretraining is required but experience in high school auto shop courses is very helpful. Some large automotive manufacturers provide periodic training clinics. Opportunities for Automotive Service Mechanics are excellent. Employees are usually paid an hourly wage and work a 40 to 48-hour week. Beginning weekly salary is approximately $120.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

BRAKE REPAIRMAN
D.O.T. No: 620.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

BRAKE REPAIRMAN: Brake Repairmen adjust brakes, replace brake linings, resurface brake drums, repair hydraulic cylinders, and make other repairs on brake systems. Some Brake Repairmen who work in brake service shops may also replace shock absorbers, mufflers, and springs.

RELATED OCCUPATIONS:

Automobile Tune-up Man
Automobile Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Welding
Machine Shop
Shop Mathematics

ADDITIONAL INFORMATION:

A high school diploma or the equivalent is preferred by most employers. Brake repair training is offered at high schools, community colleges, regional occupational centers, and technical schools. On-the-job training is offered by most employers. To become a qualified Brake Repairman usually takes 2 years of on-the-job training and experience under a skilled repairman. Car dealers, automotive repair shops, tire outlets, and large department stores hire Brake Repairmen. Opportunities for employment are expected to stabilize during the '70s. Starting salaries range from $120 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

BRAZER, ASSEMBLER

D.O.T. No: 814.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

BRAZER, ASSEMBLER: Assembler Brazers bond together metal components as specified by layout, work order, or blueprints, using a hand torch and brazing rods or solder.

RELATED OCCUPATIONS:

Gas Welder
Solderer

JOB RELATED HIGH SCHOOL SUBJECTS:

Welding
Shop Mathematics
Blueprint Reading

ADDITIONAL INFORMATION:

Most employers prefer high school graduates. Training can be obtained from high school, community colleges, and regional occupational programs, and is usually available on the job. Brazers are generally employed by electronic or refrigeration companies. Beginning salaries are approximately $115 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

D.O.T. No: 812.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

COMBINATION WELDER: Combination Welders weld metal parts together according to layouts, blueprints, or work orders, using both gas welding or brazing and any combination of arc welding processes. They also perform related tasks such as flame cutting and grinding.

RELATED OCCUPATIONS:

Arc Welder
Gas Welder

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Welding
Blueprint Reading

ADDITIONAL INFORMATION:

A high school diploma is recommended for employment. Most employers prefer to hire new employees who have had high school or technical school training in welding methods. Courses in mathematics, mechanical drawing, and blueprint reading are recommended. To become a skilled Combination Welder usually takes 2 or more years of on-the-job training. Salaries vary, ranging from $140 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

DIESEL MECHANIC

JOB BRIEF

D.O.T. No: 625.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

DIESEL MECHANIC: Diesel Mechanics tune, adjust, service, maintain, repair, and overhaul all types of diesel engines for use in commerce, industry and agriculture.

RELATED OCCUPATIONS:

Motorcycle Mechanic
Automobile Mechanic
Service Engine Repairman
Gasoline Engine Repairman
Rocket Engine Component Mechanic
Airframe & Power Plant Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Shop Mathematics
Science
Basic Physics
Mechanical Drawing
Welding

ADDITIONAL INFORMATION:

This occupation requires a 4-year apprenticeship through the Mechanics Joint Apprentice Committee. Persons with a high school diploma interested in this field should get a job working for a shop and the employer will arrange the necessary training. While learning to fix diesel engines, many find it helpful to take courses in repair and maintenance of diesel equipment offered at community colleges and trade schools. Many Diesel Mechanics are expected to have their own tools. Salaries for Diesel Mechanics are approximately the same as for Auto Mechanics, with the exception that some Diesel Mechanics get a heavy duty scale. Diesel Mechanics make from $190 to $280 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

FLAME CUTTER, HAND

JOB BRIEF

D.O.T. No: 816.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

FLAME CUTTER, HAND: Flame Cutters are semiskilled workers who use hand-guided torches to cut or trim metals. They direct a flame of fuel gas burning with oxygen on the area to be cut until the metal melts and is blown or "cut" away by the pressure of the flame.

RELATED OCCUPATIONS:

- Gas Welder
- Arc Welder
- Automobile Muffler Installer
- Combination Welder

JOB RELATED HIGH SCHOOL SUBJECTS:

- Shop Mathematics
- Welding
- Blueprint Reading

ADDITIONAL INFORMATION:

High school graduation is recommended for employment. The skills necessary to be a Flame Cutter generally can be learned in a few weeks of on-the-job training. However, some knowledge of the properties of metals is beneficial for working with new alloys. Good manual dexterity, eyesight and eye-hand coordination are needed by the Flame Cutter. Employment opportunities are expected to increase during the '70s. Salaries range from $120 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 625.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

GASOLINE ENGINE REPAIRMAN: Gasoline Engine Repairmen repair and overhaul small gasoline engines such as lawn mowers, power boats, power saws, and snowmobile engines. Gasoline Engine Repairmen are also known as Small Engine Repairmen.

RELATED OCCUPATIONS:

Outboard Motor Tester
Diesel Mechanic
Fuel Injection Serviceman
Motorcycle Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Shop
Machine Shop
Metal Shop
Shop Mathematics
Welding
Industrial Arts

ADDITIONAL INFORMATION:

Most employers prefer high school graduates and will provide on-the-job training. Usually regional occupational programs or adult schools offer classes in small engine technology. Large manufacturers of small engines may offer courses in repair and sale of their products. In many areas Gasoline Engine Repairmen are required to join a union. Salaries vary greatly and may range from $100 to $220 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

GAS WELDER

D.O.T. No: 811.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

GAS WELDER: Gas Welders weld together metal parts as specified by layouts, welding diagrams, or work orders. Gas Welders use a gas torch to apply an intensely hot flame, obtained from the combustion of fuel gases, to the metal edges of the pieces to be welded together so that the edges melt and fuse.

RELATED OCCUPATIONS:

Arc Welder
Combination Welder
Flame Cutter, Hand

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Welding
Blueprint Reading

ADDITIONAL INFORMATION:

High school graduation is recommended for employment. Several years of on-the-job training are required to become a skilled Gas Welder. Most employers prefer to hire young people who have had high school or technical school training. Welders need manual dexterity, good eyesight, and good hand-eye coordination. Salaries vary widely according to geographical location, ranging from $140 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MOTORCYCLE REPAIRMAN, TRAINEE

JOB BRIEF

D.O.T. No: 620.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

MOTORCYCLE REPAIRMAN, TRAINEE: Motorcycle Repairmen repair and overhaul motorcycles, motor scooters, and similar motor vehicles.

RELATED OCCUPATIONS:

Auto Mechanic	Mechanical-Maintenance Man
Air Conditioning Mechanic	Small Engine Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Machine Shop	Shop Mathematics
Auto Shop	Metal Shop

ADDITIONAL INFORMATION:

Most employers prefer high school graduates but will accept applicants with less education. On-the-job training is available. Regional occupational programs usually offer classes in small engine technology. A year or 2 of successful employment in a mechanical occupation can provide an excellent background. Motorcycle Repairmen are required to furnish their own hand tools and may have to ride a motorcycle to road test it. Presently there are few labor unions representing motorcycle shop employees. Salary range is from $100 to $220 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 806.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

NEW CAR GET-READY MAN: New Car Get-Ready Men inspect, tune, and do repair work as is necessary to make new cars ready for delivery to customers from new car dealers. Following a checklist supplied by the manufacturer, the New Car Get-Ready Man may have to tighten cylinder head bolts, adjust the carborator, inspect the battery, perform a tune-up and adjust the motor, as well as test and adjust lights, brakes and other accessories.

RELATED OCCUPATIONS:

Auto Body Repairman
Auto Mechanic
Auto Counterman

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Industrial Arts

ADDITIONAL INFORMATION:

A high school diploma or equivalent is helpful for entry into this apprenticeable occupation. Top flight mechanics get this job, so one must already be a journeyman mechanic with years of experience. Starting salary is $150 per week and may go up to $280 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

OUTBOARD-MOTOR MECHANIC

JOB BRIEF

D.O.T. No: 623.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

OUTBOARD-MOTOR MECHANIC: Outboard-motor Mechanics analyze defects and adjust or repair electrical and mechanical parts of outboard motors, using mechanical hand tools and gauges. The replace such parts as gears, magneto points, piston rings, and spark plugs.

RELATED OCCUPATIONS:

Small Engine Repairman
Motorcycle Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Small Engines
Shop Mathematics

ADDITIONAL INFORMATION:

A high school diploma is usually the minimum requirement for Outboard-motor Mechanics. Most employers will provide on-the-job training for entry employees. Specific preparation can be obtained from high school, regional occupational programs, and some manufacturers' training courses. It usually takes 1 to 2 years to be fully competent as an Outboard-motor Mechanic. Salaries vary greatly and may range from $100 to $220 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

SERVICE STATION ATTENDANT
D.O.T. No: 915.867
D.O.T. Ref: Volume II, Page 503
Revision date: October 1973

THE JOB:

SERVICE STATION ATTENDANT: When a car or truck is driven into a service station, attendants greet the customer and inquire about their needs. Service Station Attendants may perform a variety of services for the customer ranging from directing a customer to street addresses or filling a car's gasoline tank to lubricating the car or making a minor repair.

RELATED OCCUPATIONS:

Customer Service Work
Auto Mechanic
Tow-Truck Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Distributive Education
Industrial Arts
General Mathematics

ADDITIONAL INFORMATION:

This occupation is open to high school graduates. A driver's license is frequently required. Demands appear to be constant for good trainees or good mechanics. Special personal traits are honesty, change-making ability, legible handwriting, and ability to greet customers courteously. Training is usually on the job; sometimes independent oil companies offer special attendant courses. Starting salaries are $80 to $100 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

TIRE RECAPPER

D.O.T. No: 750.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

TIRE RECAPPER: Tire Recappers (vulcanizers) put new treads on worn automobile, truck, and tractor tires which still have sound casings.

RELATED OCCUPATIONS:

Tire Serviceman

JOB RELATED HIGH SCHOOL SUBJECTS:

Metal Shop
Auto Shop

ADDITIONAL INFORMATION:

Jobs as Tire Recappers are available to high school graduates. Most tire recapping is done by large companies. Usually no test is administered to applicants. Companies offer a 2-week training program followed by a 1-year apprenticeship program. In urban areas this occupation is heavily unionized. Salary for the apprentice is $140 per week. Journeymen receive $150 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

TIRE SERVICEMAN

D.O.T. No: 915.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

TIRE SERVICEMAN: Tire Servicemen are key employees of tire sales and service companies and automotive departments of large department stores. They remove old, worn tires from cars and trucks and mount retreads or new tires. They also repair damaged tires.

RELATED OCCUPATIONS:

Tire Recapper
Service Station Attendant

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics
Metal Shop

ADDITIONAL INFORMATION:

Most employers of Tire Servicemen prefer but do not insist on high school graduation for applicants. There is no apprenticeship program for Tire Servicemen, but there is short-term on-the-job training. There are limited openings for this job. Trainees earn approximately $90 to $100 per week. A journeyman can earn between $140 and $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

WELDER

JOB BRIEF

D.O.T. No: 812.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

WELDER: Welders join pieces of metal together by placing them next to each other and melting the adjacent surfaces, causing them to flow together to achieve a strong bond.

RELATED OCCUPATIONS:

Sheet Metal Worker
Structural Ironworker
Structural Steel Worker
Welding Supervisor

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Mathematics
General Science
Mechanical Drawing
Electricity
Metal Shop
Welding

ADDITIONAL INFORMATION:

High school graduation is generally required. There are several means of entering this occupation: apprenticeships, community college training, or on-the-job training. To enter the apprenticeship program at military installations, one must pass an examination which includes mathematics through decimals and fractions, patternmaking, and spelling. Community colleges offer programs for welders. At military installations there is considerable competition for positions in apprenticeship but few apprentices will be accepted out of many applicants. The community college can prepare a person for a variety of positions. There is a continuing need for Welders. Salaries range from about $100 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

WELDER HELPER

JOB BRIEF

D.O.T. No: 819.887

D.O.T. Ref: Volume II, Page 360

Revision date: October 1973

THE JOB:

WELDER HELPER: Welder Helpers aid welders in their work by performing such tasks as moving work pieces, tools, and supplies manually or by hand truck; cleaning work pieces to remove impurities such as slag, rust, or grease; and performing general shop custodial work.

RELATED OCCUPATIONS:

Electrical Helper
Ornamental-Iron Worker Helper
Welder

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
General Industrial Arts
Welding

ADDITIONAL INFORMATION:

This is generally an entry level job to becoming a welder. No previous experience is necessary, although general industrial arts and beginning welding are helpful courses. Welding training can be obtained from technical schools, regional occupational centers, and high schools. Opportunities are favorable for Welder Helpers due to a projected rapid growth for welders in the '70s. Salaries range from $100 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

BUSINESS/CLERICAL/SALES

Page

ACCOUNTANT (Certified Public) 1

ACCOUNTING CLERK 2

ADMITTING CLERK (Hospital), see HEALTH/COSMETOLOGY page 1 . . . .

ADMINISTRATIVE AIDE 3

ADVERTISING SALESPERSON 4

AIR FREIGHT AGENT 5

AUDIT CLERK 6

BANK CLERK 7

BANK OPERATIONS TRAINEE 8

BANK TELLER 9

BILLING CLERK 10

BILLING MACHINE OPERATOR 11

BOOKKEEPER 12

BOOKKEEPING MACHINE OPERATOR 13

BUYER (Retail Trade; Wholesale Trade) 14

CALCULATING MACHINE OPERATOR 15

CASHIER 16

CATALOG ORDER CLERK 17

CLERK-TYPIST 18

COLLECTION CLERK 19

COURT REPORTER 20

CPA, see ACCOUNTANT (Certified Public) . . . .

CREDIT CLERK 21

CREDIT MANAGER 22

DATA TYPIST, see COMPUTER TECHNOLOGY, page 6 . . . .

DEMONSTRATOR, see HEALTH/COSMETOLOGY, page 4 . . . .

DUPLICATING MACHINE OPERATOR, see GRAPHIC COMMUNICATIONS page 7 . . . .

INDEX

BUSINESS/CLERICAL/SALES

Page

FILE CLERK 23

FOOD CLERK (Grocery Checker) 24

FURNITURE SALESPERSON 25

INSURANCE AGENT 26

INSURANCE CLERK (Medical) 27

JUNIOR FEDERAL ASSISTANT 28

KEYPUNCH OPERATOR 29

LEGAL SECRETARY 30

MAGNETIC TAPE TYPIST, see TECHNICAL TYPIST . . . .

MANUFACTURERS' REPRESENTATIVE 31

MEDICAL-RECORD CLERK, see HEALTH/COSMETOLOGY, page 20 . . .

MIMEOGRAPH OPERATOR, see GRAPHIC COMMUNICATIONS, page 7 . .

OFFICE CLERK (General) 32

OFFICE MACHINE SALESMAN 33

OFFICE MACHINE SERVICEMAN, TRAINEE see ELECTRICITY/ELECTRONICS, page 18 . . . .

PBX OPERATOR 34

POST OFFICE CLERK 35

PROOF MACHINE OPERATOR 36

PUBLIC RELATIONS WORKER 37

PURCHASING AGENT 38

REAL ESTATE AGENT 39

RECEPTIONIST 40

SALES CLERK (General) 41

SALESMAN/DRIVER (Routeman) 42

SECRETARY (General) 43

SECURITIES AGENT 44

SHIPPING AND RECEIVING CLERK 45

INDEX

BUSINESS/CLERICAL/SALES

Page

STENOGRAPHER 46
STOCKBROKER, see SECURITIES AGENT . . . .
STOCK CLERK 47
SWITCHBOARD OPERATOR, see PBX OPERATOR . . . .
TECHNICAL TYPIST 48
TELEGRAPHIC-TYPEWRITER OPERATOR 49
TELEPHONE OPERATOR 50
TELEPHONE SERVICE REPRESENTATIVE 51
TELETYPE OPERATOR, see TELEGRAPHIC-TYPEWRITER OPERATOR . . .
TELLER, see BANK TELLER . . . .
TRANSCRIBING MACHINE OPERATOR 52
TYPIST, see CLERK-TYPIST . . . .
WARD CLERK, see HEALTH/COSMETOLOGY, page 33 . . . .
WAREHOUSEMAN 53
WHOLESALE SALESMAN (General Merchandise) 54

ACCOUNTANT (Certified Public)

JOB BRIEF

D.O.T. No: 160.188

D.O.T. Ref: Volume II, Page 252

Revision date: October 1973

THE JOB:

ACCOUNTANT (Certified Public): Certified Public Accountants (CPA) are accountants who are licensed by the state and are qualified to perform professional accounting services for businesses, governmental agencies, and individuals. These services would include compiling and analyzing business records and preparing financial reports, such as profit and loss statements, balance sheets, cost analyses, and tax reports.

RELATED OCCUPATIONS:

Auditor
Junior Accountant
Public Accountant
Credit Analyst

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Bookkeeping
Business Machines
Accounting

ADDITIONAL INFORMATION:

This is not an entry level occupation. A bachelor's degree in business, 3-5 years experience, and successful passing of the licensing examination are necessary to be a Certified Public Accountant (CPA). CPAs may specialize in particular areas of accounting, such as budgeting, cost, machine processing, property systems, and tax. Other CPAs perform general accounting in all areas. Employment opportunities are good. This is especially true in urban areas. Salaries for Certified Public Accountants are $1,000 to $1,540 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

ACCOUNTING CLERK

JOB BRIEF

D.O.T. No: 219.488

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

ACCOUNTING CLERK: Accounting clerks are skilled office workers in business accounting offices or municipal finance departments. They may handle only one part of the accounting data and be called Accounts Payable Clerks, Accounts Receivable Clerks, or Payroll Clerks. Many of these jobs are held by women.

RELATED OCCUPATIONS:

- Bank Clerk
- Bookkeeper
- Bookkeeping Machine Operator
- Calculating Machine Operator
- Accountant
- Audit Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

- Typing
- Business Mathematics
- Business Machines
- Bookkeeping
- Accounting
- Introduction to Business

ADDITIONAL INFORMATION:

Accounting clerks must be high school graduates and two years of community college or some prior clerical experience is preferred by most employers. Employment opportunities exist with private employers and Civil Service. An Accounting Clerk must be thorough and accurate and be able to work with details. Training in accounting is available at many community colleges. Employment opportunities are limited. Starting salary is around $350 to $400 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

ADMINISTRATIVE AIDE

JOB BRIEF

D.O.T. No: 169.168
D.O.T. Ref: Volume II, Page 245
Revision date: October 1973

THE JOB:

ADMINISTRATIVE AIDE: Administrative Aides perform a wide variety of duties to assist administrators and department heads of government and industry. The job title encompasses a great many duties which may range from routine coordination of office functions to making administrative decisions.

RELATED OCCUPATIONS:

Planning Aide
Bank Operations Trainee
Management Trainee
Office Management
Department Supervisor

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Typing
Accounting
English
Speech
Office Practice
Introduction to Business

ADDITIONAL INFORMATION:

Requirements for the job of Administrative Aide are usually graduation from an accredited college or university, with a degree in accounting, political science, business administration, or related fields. Experience in a responsible administrative or supervisory clerical position including bookkeeping or semi-professional accounting duties may be substituted on a year-for-year basis for college education. Jobs may be found with city, county, and state governments; and in large business and industrial firms. Salaries range from $180 to $270 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

ADVERTISING SALESPERSON

D.O.T. No: 258.358

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

ADVERTISING SALESPERSON: Advertising Salespersons are at the heart of a newspaper, television station, or radio station's economy. The advertising time or space they sell is the company's major source of income. Advertising Salespersons are also key employees of advertising agencies.

RELATED OCCUPATIONS:

Real Estate Salesperson
Copywriter
Securities Salesperson
Insurance Salesperson
Layout Man
Account Executive

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Art
Speech
Graphic Art
General Business
Salesmanship
Journalism
English

ADDITIONAL INFORMATION:

Many men or women entering this sales field do so with a college degree in journalism. Most college graduates entering the newspaper field will enter through the editorial department, and after learning the fundamentals of the business will move to the advertising department. Much of the Advertising Salesperson's time is spent in the community and only about 20% involves office work. Both the economy and the competition of manufacturers and retail merchants for the buyer's dollar affect the opportunities for the Advertising Salesperson. Salaries range from $150 to $300 per week, depending upon experience, size of company, etc. Salaries are supplemented by commissions based upon the amount of advertising sold.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

AIR FREIGHT AGENT
D.O.T. No: 912.368
D.O.T. Ref: Volume II, Page 265
Revision date: October 1973

THE JOB:

AIR FREIGHT AGENT: Air Freight or Transportation Agents handle movement of freight, mail, and baggage through the airline terminal. They are in charge of routing inbound and outbound air freight shipments to their destination.

RELATED OCCUPATIONS:

Airline Ticket Agent and Reservations Agent

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Typing
Record Keeping

ADDITIONAL INFORMATION:

High school graduation is generally required and college training is desirable. Courses in traffic management and air transportation are offered in some community colleges. The state of the economy greatly affects all opportunities in the airline industry. Organization, physical coordination and strength, and responsibility are important characteristics for the prospective Air Freight Agent. Salaries for a 40-hour week range from $150 to $230.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

AUDIT CLERK

D.O.T. No: 210.388

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

AUDIT CLERK: Audit Clerks check all sales slips and balance cash register receipts in major department stores. They provide a basic check on money received during each day's activity.

RELATED OCCUPATIONS:

Billing Clerk
Billing Machine Operator
Credit Clerk
Collection Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Business Machines
Typing
Bookkeeping
Computer Programming

ADDITIONAL INFORMATION:

High school graduation or equivalent is a requirement, unless one has had prior job experience. Most public high schools offer basic business courses that provide skills for a job as an Audit Clerk. The Audit Clerk obtains speed and accuracy through on-the-job training but the schooling prior to employment can be a most important factor in the ability to get and hold a job. Audit Clerks should be able to run a calculating machine and a ten key adding machine. Salaries range from $90 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

BANK CLERK
D.O.T. No: 219.388
D.O.T. Ref: Volume II, Page 280
Revision date: October 1973

THE JOB:

BANK CLERK: Bank Clerks handle the paperwork associated with depositors' checking and savings accounts, loans to individuals and business firms, and other bank business. In large banks the clerk may specialize and be called proof machine operator, sorting machine operator, collection clerk, account clerk, etc.

RELATED OCCUPATIONS:

Statement Clerk
File Clerk
Operations Officer
Senior Teller
Bank Teller

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Typing
Business Machines
Business Mathematics
Business English
Economics
Office Procedures
Data Processing

ADDITIONAL INFORMATION:

Banks employ high school graduates for beginning Bank Clerk jobs. Community college training, although not required, is highly recommended. Some banks train their workers and pay them a trainee's wage until they reach a certain level of proficiency. There is always a need for Bank Clerks. Most banks stress the fact that people hired must have an outgoing personality and a neat appearance. Salaries for this position range from $300 to $500 monthly.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

BANK OPERATIONS TRAINEE

JOB BRIEF

D.O.T. No: 186.168
D.O.T. Ref: Volume II, Page 245
Revision date: October 1973

THE JOB:

BANK OPERATIONS TRAINEE: Bank Operations Trainees learn all phases of banking as they are trained to become commercial loan officers, operations officers, assistant managers or branch managers.

RELATED OCCUPATIONS:

Operations Officer
Reserve Officer
Securities Trader
Loan Officer
Bank Teller

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Mathematics
English
Bookkeeping
Speech
Accounting
Economics
Psychology

ADDITIONAL INFORMATION:

Some college training in economics, accounting, political science or liberal arts is desirable, but most banks offer their own training and educational program. Valuable experience can be obtained by summer school training programs offered by many banks. Bank Operations Trainees must be bondable and pass both aptitude and physical examinations. Opportunities for employment are good and expected to increase rapidly through the 70s. The salaries range from $630 to $810 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

BANK TELLER

JOB BRIEF

D.O.T. No: 212.368

D.O.T. Ref: Volume II, Page 267

Revision date: October 1973

THE JOB:

BANK TELLER: Bank Tellers are the middlemen for most transactions between the bank and the public. This job extends beyond the mechanics of paying out and receiving money into the area of public relations.

RELATED OCCUPATIONS:

- Operations Officer
- Proof Machine Operator
- Credit Checker
- Cashier
- Bank Clerk
- Statement Clerk
- Post Office Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

- Bookkeeping
- Typing
- Business Mathematics
- Data Processing
- Business Machines
- Economics

ADDITIONAL INFORMATION:

Most banks have a 30% turnover in tellers each year; therefore, there is always a need for people to fill this job. Banks prefer people who are high school graduates. Bank interviewers stress the fact that those hired must have outgoing personalities and a neat appearance. Some banks start people immediately as Teller Trainees, while some require lower level bank experience prior to training as a teller. Salaries for this position range from $360 to $480 a month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

BILLING CLERK

JOB BRIEF

D.O.T. No: 219.388

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

BILLING CLERK: Billing Clerks prepare bills to customers for products purchased. They price products from previously calculated lists and adjust prices to reflect discounts.

RELATED OCCUPATIONS:

Bookkeeper
Accounting Clerk
Billing Machine Operator
Payroll Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Bookkeeping
Typing
Office Practice
Data Processing

ADDITIONAL INFORMATION:

High school graduation is usually required and some employers prefer applicants having community college training or business college courses in bookkeeping, accounting, and office machines. On-the-job training can take from a few weeks to a year. The more training and experience one has, the easier it will be to obtain a job and advance. Billing Clerks who become proficient in their jobs and show a willingness to advance can become billing machine operators, payroll clerks, or bookkeepers. The 40-hour work week is standard and overtime is rare. Salaries range from $100 to $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

BILLING MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 214.488
D.O.T. Ref: Volume II, Page 280
Revision date: October 1973

THE JOB:

BILLING MACHINE OPERATOR: Billing Machine Operators prepare statements, bills, and invoices to be sent to customers. Various types of business and industrial firms use billing machines.

RELATED OCCUPATIONS:

Calculating Machine Operator
Keypunch Operator
Audit Clerk
Bookkeeping Machine Operator
Duplicating Machine Operator
Billing Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Machines
Business Mathematics
Office Practice
Typing
Bookkeeping
Data Processing

ADDITIONAL INFORMATION:

One does not ordinarily begin as a Billing Machine Operator, but as a clerk in accounting. Some employers do accept inexperienced persons and train them on the job. Minimum schooling is normally high school graduation with training in business machines and clerical courses. Some places of employment prefer community college training or business school courses in bookkeeping, office procedures, and office machines. Some machine distributors and manufacturers provide training on their particular mach There is a growing demand for Billing Machine Operators. Salaries start at $90 a week and go up to $150 a week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

BOOKKEEPER

JOB BRIEF

D.O.T. No: 210.388

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

BOOKKEEPER: Bookkeepers keep records of financial transactions for various types of businesses, balance the books, and compile reports on the financial state of business. They may also be called a junior accountant.

RELATED OCCUPATIONS:

Bookkeeping Machine Operator
Cashier
Accounting Clerk
Data Processing Operator
Audit Clerk
Paying and Receiving Clerk
Controller

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Bookkeeping
Advanced Bookkeeping
Advanced Business Mathematics
Office Machines
Accounting
Commercial Law
Business English
Filing

ADDITIONAL INFORMATION:

Most employers prefer people who have completed high school and who have included business courses in their studies. On-the-job training is given and in some businesses this includes special reading and assignments. Community college or business school training will help one advance to top positions in accounting. Some places of employment require passing a physical examination, passing security, and having character references. Bookkeepers must also be bondable, have a better than average proficiency in mathematics, be very accurate, and have the ability to use office machines. There is a moderate demand for Bookkeepers. Salaries range from $130 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

BOOKKEEPING MACHINE
OPERATOR

JOB BRIEF

D.O.T. No: 215.388
D.O.T. Ref: Volume II, Page 281
Revision date: October 1973

THE JOB:

BOOKKEEPING MACHINE OPERATOR: Bookkeeping Machine Operators keep a permanent daily record of financial transactions, posting figures in designated ledgers and journals by using an electric bookkeeping machine.

RELATED OCCUPATIONS:

- Accounting Clerk
- Bank Clerk
- Billing Machine Operator
- Proof Machine Operator
- Bookkeeper
- Calculating Machine Operator
- Billing Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

- Business Mathematics
- Bookkeeping
- Business Machines
- Typing
- Accounting

ADDITIONAL INFORMATION:

It is possible to enter the job directly out of high school if the applicant has had experience on a bookkeeping machine. Without such experience, additional schooling may be necessary. Many clerical workers advance through the ranks to Bookkeeping Machine Operator. The general outlook for employment continues to be favorable with increased business activity. Usually promotion is from a simple machine operation to more complex machines involving greater responsibilities. Many employers reassign their staff to the operation of new machines as equipment changes are made. This sometimes entails additional training and brings higher salaries. 35-40 hours per week is a standard work schedule, and salaries range from $100 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

BUYER, (Retail Trade; Wholesale Trade)

D.O.T. No: 162.158

D.O.T. Ref: Volume II, Page 484

Revision date: October 1973

THE JOB:

BUYER: Buyers hold key positions in any retail operation as they select the goods carried by the store. They also plan the retail selling program for the goods they have purchased. The financial success of the store in many ways rests on the shoulders of the Buyers. Job duties may vary considerably depending on the size and kind of store.

RELATED OCCUPATIONS:

Purchasing Agent
Salesperson
Sales Clerk
Manager
Assistant Store Manager
Field Contact Person
Supply Requirements Officer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
General Mathematics
English
Art
Speech
General Business
Salesmanship

ADDITIONAL INFORMATION:

College training is not required for the job of Buyer, but it is becoming increasingly significant. Generally one does not enter a business as a Buyer. Most employers will give on-the-job training. Experience in retail sales is a good background for this job. An applicant may be tested on general and technical knowledge and aptitude for admission to the training program. After employment there is continuing education to keep up with the constant change. There is no great turnover in this field, but there are openings for those with ability. Starting salary for Buyers is around $540 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor..

1.

2.

CALCULATING MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 216.488
D.O.T. Ref: Volume II, Page 280
Revision date: October 1973

THE JOB:

CALCULATING MACHINE OPERATOR: Calculating Machine Operators use calculating machines which perform mathematical operations quickly and accurately to compute or check figures or inventories, financial accounts, payrolls, balance sheets, credit extensions, engineering designs, and other business functions involving arithmetic calculations.

RELATED OCCUPATIONS:

- Food Clerk, Checker
- Bookkeeper
- Bookkeeping Machine Operator
- Accounting Clerk
- Audit Clerk
- Cashier
- Keypunch Operator
- Paying and Receiving Clerk
- Time Keeper

JOB RELATED HIGH SCHOOL SUBJECTS:

- Business Machines
- English
- Bookkeeping
- Typing
- Business Mathematics
- Office Practices

ADDITIONAL INFORMATION:

The student should keep in mind that new technical advances in the development of machines is reducing the need for manual operations. High school or business school graduation is the minimum requirement for entry into this field. Most places of business provide on-the-job training. Operators must like to work with numbers and be concerned with details and accuracy. This occupation often serves as an entry position for someone interested in becoming a bookkeeper or junior accountant. Salaries range from $90 to $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

CASHIER

JOB BRIEF

D.O.T. No: 211.468

D.O.T. Ref: Volume II, Page 269

Revision date: October 1973

THE JOB:

CASHIER: Cashiers receive money from customers or employees in payment for goods or services and keep records of all transactions. In many instances, other duties are also required of cashiers.

RELATED OCCUPATIONS:

Food Clerk, Checker
Bank Clerk
Bookkeeper
Sales Clerk
Time Keeper

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Bookkeeping
Typing
Business English
Office Machines

ADDITIONAL INFORMATION:

Some jobs as Cashier have no specific educational requirements and may be filled by anyone with ability and interest for figures. On-the-job training may be given in large stores. In some places of employment cashiers will be required to be bonded, give character references and furnish good recommendations from past employers. Honesty and integrity are important. Salaries range from $90 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

CATALOG ORDER CLERK

JOB BRIEF

D.O.T. No: 249.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

CATALOG ORDER CLERK: Catalog Order Clerks assist store customers in selecting mail order merchandise. They may also collect money for merchandise, receive orders by telephone, and secure credit approval for items purchased on charge accounts.

RELATED OCCUPATIONS:

Sales Clerk
Laundry Counter Clerk
Food Store Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Office Practice
Retail Merchandising
Salesmanship

ADDITIONAL INFORMATION:

There are no specific educational requirements for Catalog Order Clerk. It is possible to enter this job directly out of high school. In large stores one may be tested for mental alertness, and basic knowledge of mathematics and English. Order clerks will often take phone orders, so a pleasant telephone manner and speaking voice is very important. These clerks should have legible handwriting, and be accurate in recording prices and order numbers. From this entry position one may transfer to other jobs in retailing and customer service. There is a moderate demand for order clerks. Salaries range from $80 to $140 weekly.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

CLERK-TYPIST

D.O.T. No: 209.388

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

CLERK-TYPIST: Clerk-Typists are responsible for a vast amount of correspondence, record keeping, and other office duties. They comprise one-seventh of the total work force in the United States. Clerical workers are employed in all industries and businesses because office work is essential in nearly every type of business.

RELATED OCCUPATIONS:

Accounting Clerk
Billing Clerk
File Clerk
Secretary
Technical Typist
Keypunch Operator
Receptionist
Stenographer

JOB RELATED HIGH SCHOOL SUBJECTS:

English
General Mathematics
Typing
Office Practice
Bookkeeping
Business Machines

ADDITIONAL INFORMATION:

The occupation is open to high school graduates. One may be given a general clerical test. For all government jobs a Civil Service test is given including typing, business knowledge, skills, and an oral interview. There is a moderate demand for such workers. Those who have specialized skills and are well trained will have no difficulty finding a job; however, automation will have an effect on some routine jobs. Technical school, business school, or community college training will help a Clerk-Typist advance. Some employers may require Clerk-Typists to have a knowledge of office machines, such as adding machines and calculators and be able to work at routine tasks. Salaries range from $110 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

COLLECTION CLERK

JOB BRIEF

D.O.T. No: 240.388

D.O.T. Ref: Volume II, Page 256

Revision date: October 1973

THE JOB:

COLLECTION CLERK: Collection Clerks contact customers, notify them of delinquent accounts and attempt to secure payment from them. The job includes many other clerical duties, such as filing, typing, correspondence, and records management. Collection Clerks may also be called Collection and Credit Clerks, Collection Contract Clerks, Collection Correspondents, or Past Due Accounts Clerks.

RELATED OCCUPATIONS:

Credit Clerk
Billing Clerk
Correspondence Clerk
Credit Reporter
Posting Clerk
Claims Clerk
Loan Clerk
Bill Collector

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
English
Office Procedure
Salesmanship
Typing
Bookkeeping
Business Mathematics
Business Machines

ADDITIONAL INFORMATION:

A high school education is preferred by most employers. Some places of employment prefer community college training or business college courses in bookkeeping, office management, and salesmanship. Most community colleges offer courses in business. On-the-job training can take from a few weeks to a year. The more training and experience one has, the easier it will be to obtain a job and advance. Credit collectors must be able to deal with people. They must remain poised, tactful, and yet forceful in demanding payment. There is a moderate demand for Collection Clerks. The usual starting salary range is $300 to $600 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

COURT REPORTER

JOB BRIEF

D.O.T. No: 202.388
D.O.T. Ref: Volume II, Page 278
Revision date: October 1973

THE JOB:

COURT REPORTER: Court Reporters record all actions that take place in courtrooms and hearings. It is their sole responsibility to record by manual or machine shorthand all words spoken during court sessions and hearings and to transcribe their notes.

RELATED OCCUPATIONS:

Stenographer
Secretary

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Shorthand
English
Business Writing
Business Machines

ADDITIONAL INFORMATION:

There is no entry to this occupation directly from high school. It usually requires a 2 year course upon completion of high school. Most of the schools teaching this subject are private with only a few community colleges offering this course. It is necessary to pass a shorthand reporter examination administered in each state. Court Reporters stress that in order to be successful, a student must have excellent typing skills plus an extensive vocabulary. The vocabulary is important due to the many diversified subjects covered in court trials. There is a shortage of personnel in this field. This shortage plus the increased case loads in the courts make the future look bright for those interested in this occupation. Salaries range from $170 to over $250 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

CREDIT CLERK

JOB BRIEF

D.O.T. No: 249.368
D.O.T. Ref: Volume II, Page 258
Revision date: October 1973

THE JOB:

CREDIT CLERK: Credit Clerks interview applicants for loans and credit, process applications, and verify credit references and information. They may assist customers in filling out applications, check applicant's assets, credit experience, and personal references. Credit Clerks may also be called Credit Interviewers, Credit Inquiry Clerks, or Loan-Application Clerks.

RELATED OCCUPATIONS:

Interviewer
Clerical Worker
Collection Clerk
Credit Manager
Bookkeeping Machine Operator
Filing Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Filing
Business Mathematics
Business English
Bookkeeping
Business Machines

ADDITIONAL INFORMATION:

It is possible to enter this job directly out of high school and receive any training needed on the job. Some employers prefer applicants with some business school or community college training. Additional training will improve efficiency and chances for advancement to higher paying jobs. Job opportunities are fair and remain rather stable. Salaries range from $80 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

CREDIT MANAGER

D.O.T. No: 168.168

D.O.T. Ref: Volume II, Page 245

Revision date: October 1973

THE JOB:

CREDIT MANAGER: Credit Managers are responsible for decisions regarding the extension of credit to customers and patrons of all types of businesses and for account collections.

RELATED OCCUPATIONS:

Billing Clerk
Credit Clerk
Collection Clerk
Office Manager

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Bookkeeping
Accounting
Business Law
English
Business Mathematics
Office Practice
Typing

ADDITIONAL INFORMATION:

A high school diploma is required and for advancement to top-level jobs, a bachelor of business administration degree is an asset. Several years of experience in credit work is usually a prerequisite for the job of Credit Manager who must be able to discuss bills and payments with the public, remaining tactful yet firm. Salaries range from $120 per week to $520 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

FILE CLERK

JOB BRIEF

D.O.T. No: 206.388
D.O.T. Ref: Volume II, Page 276
Revision date: October 1973

THE JOB:

FILE CLERK: File Clerks are concerned with putting material in and removing it from files, searching and investigating for information contained in files, inserting additional data in file records, making reports and keeping files current.

RELATED OCCUPATIONS:

- Clerk Typist
- Secretary
- Insurance Clerk
- Mail Sorter
- Accounting Clerk
- Cataloger
- Keypunch Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

- English
- Spelling
- General Mathematics
- Typing
- Record Keeping
- Filing
- Business Machines
- Office Practices

ADDITIONAL INFORMATION:

Some employers require that the applicant have a high school education. Employment opportunities for File Clerks are stable and the turnover is exceptionally high in this field. Only a small number of people are employed in this capacity alone, however, as most office positions require typing skills. File Clerks should be able to perform routine duties on a continuous basis while remaining alert and attentive to detail. This is often an entry level job for which on-the-job training is given. Salaries for a 40-hour week range from $100 to $130.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

FOOD CLERK (Grocery Checker)

JOB BRIEF

D.O.T. No: 299.468

D.O.T. Ref: Volume II, Page 269

Revision date: October 1973

THE JOB:

FOOD CLERK (Grocery Checker): Food Clerks compute the amount of a customer's purchases using a computing cash register. The checker also collects payment and may bag the customer's groceries.

RELATED OCCUPATIONS:

Cashier
Sales Clerk
Courtesy Clerk
Bank Clerk
Bank Teller

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Business Machines
Retailing

ADDITIONAL INFORMATION:

There are no formal educational requirements for this occupation. However, in many areas an apprenticeship of approximately 1 year must be served. Some chain stores have their own checker schools. After being employed, most union contracts call for application for membership in the Retail Clerks Union within the first 30 days of employment. Community colleges offer business courses especially recommended for Food Clerks who wish to advance in their occupation. Opportunities are good but competitive. Salaries for a 40-hour week range from $120 starting to $200. Those in management positions may make up to $400 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

FURNITURE SALESPERSON

D.O.T. No: 274.358

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

FURNITURE SALESPERSON: Furniture Salespersons sell all lines of household furniture such as sofas, chairs, bedroom sets, dinettes, and tables. They work in furniture stores or large department stores.

RELATED OCCUPATIONS:

Retail Sales Clerk
Sales Engineer
Building Supplies Salesperson

JOB RELATED HIGH SCHOOL SUBJECTS:

Salesmanship
Retailing
Interior Decoration
Home Decoration
Speech
Business Mathematics

ADDITIONAL INFORMATION:

High school or community college graduation are not formal requirements for employment as a Furniture Salesperson but are preferred by employers. Opportunities for the beginner to enter this occupation are limited. Previous successful sales experience is usually required. Mature people are usually placed in this sales classification for they instill confidence in the buyer. On-the-job training is often provided by stores and manufacturers. The 40-hour work week is standard; however, overtime work, evening, and weekend work is common. Salary is either straight commission, fixed salary, or a combination of the two. Yearly earnings range from $10,000 to $18,000. In many stores the salesperson works on a salary of $500 to $600 per month plus commission.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INSURANCE AGENT

JOB BRIEF

D.O.T. No: 250.258
D.O.T. Ref: Volume II, Page 488
Revision date: October 1973

THE JOB:

INSURANCE AGENT: Insurance Agents, also known as Insurance Salesmen, sell insurance policies and contracts which protect lives and property against future loss and injury as well as assist individuals and businesses in the planning for insurance coverage.

RELATED OCCUPATIONS:

Claims Adjuster
Securities Salesman
Real Estate Salesman
Insurance Broker

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
English
Speech
Accounting
Bookkeeping
Typing
Salesmanship

ADDITIONAL INFORMATION:

The trend seems to be towards the college-educated insurance salesman even though there are many men now selling insurance who do not have college degrees. Insurance companies are looking for responsible and hard-working people. Most companies will train agents in the necessary sales skills. Salaries for the beginning agent are from $400 to $500 per month and with commissions the beginning agent can expect a salary of about $800 to $1,000 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

INSURANCE CLERK (Medical)

JOB BRIEF

D.O.T. No: 210.368
D.O.T. Ref: Volume II, Page 258
Revision date: October 1973

THE JOB:

INSURANCE CLERK (Medical): Insurance Clerks in a medical facility are responsible for preparation of insurance benefit applications for patients and for collection of all insurance accounts in accordance with established policies and procedures.

RELATED OCCUPATIONS:

Clerk Typist
Billing Clerk
Account Information Clerk
Receptionist
Claims Adjuster

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Office Practices
Business/Office Machines
Business Mathematics
Bookkeeping

ADDITIONAL INFORMATION:

Most hospitals are interested in people with at least a high school diploma or equivalent. The best jobs will go to well-trained, competent, experienced persons. On-the-job training is available. Some previous office experience is valuable. Courses of study beyond high school, business school, or community college training will help in advancement. Salaries range from about $120 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

JUNIOR FEDERAL ASSISTANT

D.O.T. No: None

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

JUNIOR FEDERAL ASSISTANT: Junior Federal Assistants are employees of the U.S. Government and work in a wide variety of fields assisting professional government workers.

RELATED OCCUPATIONS:

- Office Clerk
- Accounting Clerk
- Secretary

JOB RELATED HIGH SCHOOL SUBJECTS:

- College Preparation Courses (recommended)
- Mathematics
- English
- Typing

ADDITIONAL INFORMATION:

Applicants must have a high school diploma or equivalent and business school or community college is desirable. This is a U.S. Civil Service position and all applicants must pass a Civil Service test. Salaries are about $450 per month at entry level.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

KEYPUNCH OPERATOR

JOB BRIEF

D.O.T. No: 213.582

D.O.T. Ref: Volume II, Page 274

Revision date: October 1973

THE JOB:

KEYPUNCH OPERATOR: Keypunch Operators use a machine, similar to an electric typewriter, pressing proper keys in correct order to punch data onto cards. Data cards are then used in computers or other data processing machines. Keypunch Operators perform routine work under supervision to assure accuracy and precision.

RELATED OCCUPATIONS:

Varitypist
Addressing Machine Operator
Office Clerk
Stenographer
Tabulating Machine Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Office Practice/Procedures
Business Machines

ADDITIONAL INFORMATION:

Keypunch Operators usually are required to have a high school diploma and typing skills of 35 words per minute. Specific training in keypunching is available in some high schools, adult education programs and community colleges. Some employers will provide on-the-job training for employees transferring to the data processing department. Employment opportunities are expected to remain good, but there may be some changes in job requirements as changes in technology occur. Salaries for Keypunch Operators average $90 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LEGAL SECRETARY

JOB BRIEF

D.O.T. No: 201.368

D.O.T. Ref: Volume II, Page 263

Revision date: October 1973

THE JOB:

LEGAL SECRETARY: Legal Secretaries perform general clerical duties and secretarial work for an attorney or law firm. In addition, secretaries prepare papers and correspondence of a legal nature, such as summonses, complaints, wills, motions, and subpoenas.

RELATED OCCUPATIONS:

- Secretary
- Stenographer
- Clerk Typist
- Court Reporter

JOB RELATED HIGH SCHOOL SUBJECTS:

- Typing
- Shorthand
- Office Procedures
- Latin
- English

ADDITIONAL INFORMATION:

A high school diploma or equivalent is required. In most cases, 2 years of community college or business school, with specific training in legal work is required. Familiarity with legal terminology and procedures, shorthand, and skills in machine transcription are necessary. At the present time there is a need for trained people in this occupational area. High school graduates can enter this field by beginning in a law office as a legal secretary trainee and learn while on the job. Salaries for the trainee begin at about $100 to $110 per week. Trained legal secretaries begin at about $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MANUFACTURERS' REPRESENTATIVE

JOB BRIEF

D.O.T. No: 289.158

D.O.T. Ref: Volume II, Page 484

Revision date: October 1973

THE JOB:

MANUFACTURERS' REPRESENTATIVE: Manufacturers' Representatives sell products to wholesalers or other customers for one or more manufacturers. These representatives call on regular or prospective customers, demonstrate products, and answer questions on products.

RELATED OCCUPATIONS:

Purchasing Agent
Retail Buyer
Wholesale Salesperson

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
English
Business Mathematics
Salesmanship
Speech
Psychology

ADDITIONAL INFORMATION:

A high school education is the minimum educational requirement for a position in this field, but there is an increasing demand for college trained personnel. Some manufacturers of technical or complicated products demand their Manufacturers' Representatives have technical education, such as engineering and chemistry. Employment opportunities for Manufacturers' Representatives are favorable for the '70s, particularly for trained, experienced salesmen. Starting salaries average $190 per week plus commissions and bonuses.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

OFFICE CLERK (General)

D.O.T. No: 219.388

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

OFFICE CLERK (General): Office Clerks perform a combination of clerical duties involving many business skills. Office Clerks operate such office machines as the typewriter, duplicator, and calculator. They also answer phones, handle mail, and send and receive bills and checks. There are office clerks in almost all types of industry and business.

RELATED OCCUPATIONS:

Stenographer
Receptionist
Accounting Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Business English
Business Mathematics
Office Machines
Bookkeeping I
Typing

ADDITIONAL INFORMATION:

A high school diploma is essential for entry into most Office Clerk positions. With further education and on-the-job training there are many opportunities for advancement in this field. Salaries range from $80 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

OFFICE MACHINE SALESMAN
D.O.T. No: 281.358
D.O.T. Ref: Volume II, Page 488
Revision date: October 1973

JOB BRIEF

THE JOB:

OFFICE MACHINE SALESMAN: Office Machine Salesmen demonstrate and sell machines, such as typewriters, copymachines, adding, calculating, and duplicating machines. They may also sell related supplies, such as ribbons, ink, paper, and tapes.

RELATED OCCUPATIONS:

Coin-Vending Machine Salesman
Barber/Beauty Supply Salesman
Office Machine Serviceman

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
English
Speech
Business Machines
Bookkeeping
Economics
Office Practice

ADDITIONAL INFORMATION:

Although high school graduates may be hired, an associate of arts degree is generally the minimum educational requirement for Office Machine Salesman. Community college courses, such as salesmanship, marketing, business machines, and psychology are generally helpful. Also helpful are basic courses in electronics and engineering. Most jobs exist in large metropolitan areas. They may be with business machine companies which distribute many brand names or with a dealer specializing in one line of equipment. Opportunities for employment are good and are expected to increase during the '70s. Starting salaries range from $120 to $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

PBX OPERATOR

JOB BRIEF

D.O.T. No: 235.862

D.O.T. Ref: Volume II, Page 291

Revision date: October 1973

THE JOB:

PBX OPERATOR: PBX Operators manipulate a cord or cordless switchboard to receive and/or relay incoming, outgoing, and interoffice phone calls and other communications. They are the first contact callers have on phoning an office. PBX Operators often serve as the information receptionist for an office.

RELATED OCCUPATIONS:

Telephone Operator
Airline Ticket Agent
Receptionist

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Office Practice
Speech

ADDITIONAL INFORMATION:

PBX Operators should have a pleasing voice and patience. Most companies require a high school diploma or equivalent. Employers usually require typing as an additional skill. The telephone company employs thousands of people every year to fill new positions and to replace people who transfer, retire, or are promoted. In addition to those with the telephone company, many opportunities exist with large businesses and industrial firms. Salaries start at about $90 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

POST OFFICE CLERK

JOB BRIEF

D.O.T. No: 232.368

D.O.T. Ref: Volume II, Page 267

Revision date: October 1973

THE JOB:

POST OFFICE CLERK: Post Office Clerks perform a series of functions in order to sort, distribute, and process the mail at the various stages from mailing to delivery.

RELATED OCCUPATIONS:

Cashier
Clerical Work
Mail Carrier
Customer Service Work

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

There is no formal educational requirement although a high school graduate is generally preferred. Applicants must receive a passing score on a written Postal Service examination and pass a physical examination. Community college courses for those interested in promotional opportunities are classes in personnel management and business practices. A very limited number of job opportunities are available with the post office at this time. The normal work week is 40 hours but often varies with seasons and location. Salaries range from $150 to $170 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PROOF MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 217.388
D.O.T. Ref: Volume II, Page 280
Revision date: October 1973

THE JOB:

PROOF MACHINE OPERATOR: Proof Machine Operators sort, record, and prove records of bank transactions, such as checks, deposit slips, and withdrawal slips, using proof machines.

RELATED OCCUPATIONS:

Bank Clerk
Billing Machine Operator
General Office Clerk
Bookkeeper
Computer Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Shorthand
Business Machines
Business Mathematics
Office Procedures

ADDITIONAL INFORMATION:

Proof Machine Operators usually work in banks sorting, recording, and proving records. The demand for Proof Machine Operators is expected to increase moderately through the '70s. High school graduation is usually required. Previous experience, community college training, or business school training is sometimes preferred by employers. Entry is usually as a teller with a bank and then advancement to a Proof Machine Operator. Salaries start at about $80 per week and go to $110 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

PUBLIC RELATIONS WORKER

D.O.T. No: 165.068

D.O.T. Ref: Volume II, Page 482

Revision date: October 1973

THE JOB:

PUBLIC RELATIONS WORKER: Public Relations Workers help employers build and maintain a favorable public image. They plan the kind of publicity that will be most effective, such as news releases, radio and/or television announcements and appearances, and information pamphlets creating desired attitudes and opinions toward their employer's organization, products or programs.

RELATED OCCUPATIONS:

Advertising Copywriter
Public Program Supervisor
Reporter
Technical Writer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Speech
Journalism
Typing
Graphics Communications

ADDITIONAL INFORMATION:

A degree from a 4-year college or university is the recommended preparation for entry into the public relations field. Usually an English, journalism, public relations or business administration major is preferred. Public Relations Workers are employed usually by large businesses, advertising agencies or governmental organizations. They may specialize in a particular facet of public relations, such as speech making or writing news releases. Hours of work are likely to be irregular at times. Opportunities for employment are expected to increase during the '70s but jobs are limited and competition is keen. Starting salaries for Public Relations Workers with a college degree and no experience range from $160 to $190 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

PURCHASING AGENT

JOB BRIEF

D.O.T. No: 162.158

D.O.T. Ref: Volume II, Page 484

Revision date: October 1973

THE JOB:

PURCHASING AGENT: Purchasing Agents buy materials, equipment, supplies, and services for businesses, industry, and governmental units.

RELATED OCCUPATIONS:

Buyer
Shipping & Receiving Clerk
Accountant
Sales Engineer
Production Planner

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Mathematics
Retailing
Accounting
Salesmanship
Typing
Industrial Arts
Science

ADDITIONAL INFORMATION:

This is not an entry level position. Purchasing Agents have varied backgrounds. A high school graduate may begin in the warehouse, in the parts department, or in sales. With experience and training in night school, community college, or a 4-year college, it is possible to eventually become a Purchasing Agent. With a degree in business administration, one may begin in management and work into purchasing. There is great demand in many metropolitan areas for skilled Purchasing Agents; however, it does take several years' experience in industry before being eligible for these positions. Salaries at three levels include a buyer trainee at $110 to $140 per week, a qualified buyer at $140 to $190 per week, and a Purchasing Agent at $260 to $410 per week. Some top purchasing executives earn as much as $75,000 a year.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

REAL ESTATE AGENT

JOB BRIEF

D.O.T. No: 250.358
D.O.T. Ref: Volume II, Page 488
Revision date: October 1973

THE JOB:

REAL ESTATE AGENT: In the vast majority of property transactions, Real Estate Agents are instrumental in bringing the buyer and seller together. Working through a broker, these salesmen sell and rent houses and commercial property for clients.

RELATED OCCUPATIONS:

- Title Examiner
- Real Estate Appraiser
- Right-of-Way Agent
- Salesman

JOB RELATED HIGH SCHOOL SUBJECTS:

- Economics
- Business Mathematics
- Business Law
- Sales
- General Business

ADDITIONAL INFORMATION:

There are no formal educational requirements for employment as a Real Estate Agent but it is necessary to pass a Real Estate License examination. Most community colleges offer courses in real estate in preparation for the license. Employment opportunities vary with the area and the economic conditions. Most real estate firms prefer to hire licensed salesmen 25 years old or older. It takes patience, endurance, and experience to create the client list necessary for success. Real Estate salesmen are usually paid a commission of the property they sell, so salaries vary widely.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

RECEPTIONIST

JOB BRIEF

D.O.T. No: 237.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

RECEPTIONIST: Receptionists greet persons who come into the office and direct them to the proper department or staff member who can help them. Receptionists perform other office tasks such as typing, routine clerical work, and operating a small switchboard.

RELATED OCCUPATIONS:

PBX Operator
Clerk Typist
Bookkeeper
Key Punch Operator
Stenographer

JOB RELATED HIGH SCHOOL SUBJECTS:

Office Procedures
Speech
Business Machines
Typing
Business Mathematics

ADDITIONAL INFORMATION:

While there are no formal educational requirements for Receptionists, high school graduation, community college, adult school, or business school is helpful. Applicants should be able to type 40 words per minute. A pleasant personality, pleasing speaking voice, good judgment, and the ability to communicate information accurately are prime requisites. One can advance from receptionist to secretary depending upon experience and office skills. Starting salary is about $110 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SALES CLERK (General)

JOB BRIEF

D.O.T. No: 289.458

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

SALES CLERK (General): Sales Clerks are expected to aid the customer upon his request in locating the merchandise desired. The Clerk may help customers decide between various articles and then return to the check stand to compute the customers' purchases, collect payments, and bag purchases. The Sales Clerk may also arrange merchandise and displays, take inventory, and order merchandise.

RELATED OCCUPATIONS:

Buyer
Food Clerk
Stock Clerk
Cashier
Checker
Salesman

JOB RELATED HIGH SCHOOL SUBJECTS:

Merchandising
Business Mathematics

ADDITIONAL INFORMATION:

One may start working in a variety store as a Sales Clerk, or as a stock clerk, porter, or other position and then become a Sales Clerk. A high school diploma is not required, but is preferred by most employers. A test is often given in mental alertness, general knowledge of English, and personality traits. In the larger stores in some areas there are many part-time workers. In these stores retail Sales Clerks have the opportunity to advance to or transfer to a variety of positions in sales, services, and accounting. There is a moderate demand for retail sales persons. Good appearance, pleasant personality, and good health are important. Training is offered on the job and in some stores through classes and reading materials. Salaries range from $80 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

SALESMAN/DRIVER (Routeman)

D.O.T. No: 292.358

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

SALESMAN/DRIVER (Routeman): Salesmen/Drivers or Routemen drive trucks, usually over a regular route, in order to sell and deliver all kinds of goods to customers.

RELATED OCCUPATIONS:

Messenger
Delivery Man
Truck Driver
Salesman

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Mathematics
Sales Training
Driver Training

ADDITIONAL INFORMATION:

A high school diploma is not required, but it is essential that Salesmen/Drivers read, write, and understand English. To be a Salesman/Driver one must have an operator's and/or chauffeur's license and a good driving record. Some employers give an aptitude test. Employment opportunities for persons under 20 years of age are limited. A neat appearance and a pleasant disposition are important for developin customer relations. Some jobs, particularly in beverage delivery, requi heavy lifting. Most Routemen are members of a labor union, though the particular one varies with the industry involved. Salaries range from $170 to $250 per week, plus benefits.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

SECRETARY (General)

D.O.T. No: 201.368

D.O.T. Ref: Volume II, Page 263

Revision date: October 1973

THE JOB:

SECRETARY (General): Secretaries assist executives in carrying out the details of their work. They do typing and other clerical jobs. Their responsibilities may cover business machine operation and may include supervision of other office personnel.

RELATED OCCUPATIONS:

- Stenographer
- Medical Secretary
- Legal Secretary
- Clerk Typist
- Receptionist
- General Office Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

- Shorthand
- Business Machines
- Business Mathematics
- Filing
- Bookkeeping
- Business Law
- Typing
- Office Procedures

ADDITIONAL INFORMATION:

A high school diploma or equivalent is usually required in addition to the necessary office skills. Specialties in the medical and legal fields require related vocabulary proficiency and familiarity with special report forms required in the field. There are usually openings in this occupational area. Most secretaries are promoted through the clerical ranks, usually beginning as a typist or stenographer. To qualify for positions in county, state, or federal government, a Secretary must be able to take dictation at 80 words per minute and type at least 40 words per minute. The turnover rate is high. Salaries range from $140 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SECURITIES AGENT

JOB BRIEF

D.O.T. No: 251.258

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

SECURITIES AGENT: Securities Agents are employed by private brokerage firms. They sell stocks, bonds, and other securities; give counsel and information; and provide related services to the public.

RELATED OCCUPATIONS:

Real Estate Agent
Insurance Agent
Financial Service Salesman
Investment and Tax Consulting Service Agent

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Speech
Communications
Typing
Psychology

ADDITIONAL INFORMATION:

For entry into this occupation, a degree from a 4-year college or university is usually required. Stock brokerage companies normally employ graduates with some business experience as trainees. The U.S. Government Securities and Exchange Commission investigates all trainees for their record of financial responsibility and integrity. Most states require Securities Agents to be licensed. In addition, agents must be registered with the National Association of Securities Dealers, Inc. or the exchange where the firm transacts business. They must pass the Securities and Exchange Commission's General Securities examination. Employment opportunities are expected to be good through the '70s. Beginning agents earn about $800 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SHIPPING AND RECEIVING CLERK

JOB BRIEF

D.O.T. No: 222.387

D.O.T. Ref: Volume II, Page 271

Revision date: October 1973

THE JOB:

SHIPPING AND RECEIVING CLERK: Shipping and Receiving Clerks do the clerical work necessary to keep track of goods transferred from one place to another. Shipping and Receiving Clerks check and record information on outgoing shipments and on the arrival of goods.

RELATED OCCUPATIONS:

Stock Clerk
Warehouseman
Hospital Storekeeper

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Typing

ADDITIONAL INFORMATION:

High school graduation is not a requirement for a Shipping and Receiving Clerk; however, most employers prefer the high school diploma. Although this job may be an entry level occupation, it sometimes requires experience in warehouse and stockroom work. There are limited openings and the competition for these jobs is keen. To enter warehouse work one may contact the local union or apply directly to nonunion employers. Salaries range from $110 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

093

STENOGRAPHER

JOB BRIEF

D.O.T. No: 202.388
D.O.T. Ref: Volume II, Page 278
Revision date: October 1973

THE JOB:

STENOGRAPHER: Stenographers take dictation in shorthand, and transcribe notes using a typewriter. They may also perform a variety of clerical duties and operate various types of office machines.

RELATED OCCUPATIONS:

Clerk Typist
Court Reporter
Office Clerk
Medical Stenographer
Legal Secretary
General Secretary

JOB RELATED HIGH SCHOOL SUBJECTS:

Business English
Business Mathematics
Typing
Shorthand
Office Practice
Office/Business Machines
Speech
Bookkeeping

ADDITIONAL INFORMATION:

A high school diploma or equivalent is the minimum educational requirement for Stenographers. A minimum of 80 to 120 words per minute must be taken in shorthand with a high degree of accuracy. One must be able to type at least 40 words per minute. A clerical aptitude test may be required before being hired. Individuals who meet the above qualifications can qualify for employment. Courses in office occupations are helpful in developing general secretarial skills. Future prospects are good for qualified people especially in federal, state, county, school, and city agencies. Special personal traits include neatness, accuracy, dependability, good judgment, tact, and friendliness. Salaries range from about $125 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

STOCK CLERK

JOB BRIEF

D.O.T. No: 223.387
D.O.T. Ref: Volume II, Page 271
Revision date: October 1973

THE JOB:

STOCK CLERK: Stock Clerks are responsible for receiving, unpacking, verifying, storing, and issuing supplies and equipment in a stockroom or warehouse.

RELATED OCCUPATIONS:

Shipping and Receiving Clerk
Pharmacy Helper
Telephone Supplyman
Tool Room Attendant

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Arithmetic
Typing
Office Practice
Business Records

ADDITIONAL INFORMATION:

High school graduates can find employment in this occupation. It is an excellent beginning for department store work. Post-high school training in community college, adult school, or private business school is recommended for those who have the ambition to advance to sales or management positions. Stock Clerks should be strong, have good judgment, be able to follow instructions, and be accurate. Salaries range from $100 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

TECHNICAL TYPIST

JOB BRIEF

D.O.T. No: 203.588
D.O.T. Ref: Volume II, Page 287
Revision date: October 1973

THE JOB:

TECHNICAL TYPIST: Technical Typists type letters, reports, stencils, forms, and other straight copy material from rough draft or corrected copy. They may operate duplicating machines to reproduce copy. Technical Typists are employed in many industries as well as in the graphic communications field. Technical Typists may also be operators of magnetic tape typewriters.

RELATED OCCUPATIONS:

Clerk-Typist
Keypunch Operator
Tape Perforator
Teletypewriter

JOB RELATED HIGH SCHOOL SUBJECTS:

English
General Mathematics
Typing
Office Practice
Business Machines
Bookkeeping

ADDITIONAL INFORMATION:

This occupation is open to high school graduates who have received specialized training in typing and on other office machines. Work activities in this field primarily involve recording verbal or written material by the use of the typewriter. Attentiveness to detail to avoid errors in transferring data, good motor coordination and finger dexterity, and adaptability for repetitious work are essential qualifications to become a Technical Typist. Salaries range from approximately $110 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

TELEGRAPHIC-TYPEWRITER OPERATOR

JOB BRIEF

D.O.T. No: 203.588
D.O.T. Ref: Volume II, Page 287
Revision date: October 1973

THE JOB:

TELEGRAPHIC-TYPEWRITER OPERATOR: Telegraphic-Typewriter Operators send telegraph messages automatically through a specialized typewriter which sends the message directly by wire to the destination. These workers are also called Teletype Operators.

RELATED OCCUPATIONS:

Clerk Typist
Perforator Typist

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Spelling

ADDITIONAL INFORMATION:

This is an occupation that is rapidly becoming automated, thus job opportunities are very limited. In the middle thirties there were 98,000 men in this occupation; presently there are approximately 30,000. Hiring is through companies rather than through unions. Railroad companies, telegraph companies, and airlines offer the best opportunities for employment. A typing speed of 35 words per minute and good spelling are required for this job. A high school diploma is preferred by most employers. Starting salaries range from $100 to $120 per week, with experienced operators earning up to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

TELEPHONE OPERATOR

JOB BRIEF

D.O.T. No: 235.862

D.O.T. Ref: Volume II, Page 291

Revision date: October 1973

THE JOB:

TELEPHONE OPERATOR: Telephone Operators operate telephone switchboards to relay incoming and internal calls to phones in an establishment, and make connections with external lines for outgoing calls. They also take messages, supply information to callers, record the number of calls made and the charges per call.

RELATED OCCUPATIONS:

Receptionist
Telephone Answering Serviceperson
PBX Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Speech
Typing
Office Practice

ADDITIONAL INFORMATION:

In many companies a written examination and company physical examination must be taken prior to employment. Previous experience is not always necessary, as people often are trained on the job. One of the best features of this job is the opportunity for advancement. Many persons in management positions at local telephone companies started as operators. One can advance to instructor, supervisor, service assistant, or assistant traffic operating manager. Opportunities are usually quite good; however, in a tight economy this market becomes closed and competition for jobs extremely high. Salaries for a 40-hour week range from $110 to $140.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

TELEPHONE SERVICE REPRESENTATIVE

D.O.T. No: 249.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

TELEPHONE SERVICE REPRESENTATIVE: Telephone Service Representatives provide contact between the phone company and the public. The Representatives are usually the customer's first contact when they call or stop in to obtain telephone service. The Representatives handle requests for additional service, questions about bills, and customer complaints.

RELATED OCCUPATIONS:

Accounting Clerk
Telephone Operator
Clerk-Typist
Secretary
Receptionist
Cashier

JOB RELATED HIGH SCHOOL SUBJECTS:

Speech
Bookkeeping
Spelling
Business Mathematics
Office Practice

ADDITIONAL INFORMATION:

One year of college or business experience is preferred. This occupation requires proficiency in spelling, grammar, and mathematics. One should be articulate, have a pleasing voice, and be especially tactful. These workers should also have the ability to use good judgment and adapt to changing work situations and different types of customers. This job requires a certain amount of maturity and self-confidence for successful customer contact and selling. The employee receives 8 to 9 weeks of individual and group instruction. This job offers opportunities for advancement to the position of office supervisor and business office supervisor. Salaries range from $120 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

TRANSCRIBING MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 208.588
D.O.T. Ref: Volume II, Page 287
Revision date: October 1973

THE JOB:

TRANSCRIBING MACHINE OPERATOR: Transcribing Machine Operators type letters and reports or other documents as they listen to dictation recorded on tape, magna belts or records. Transcribing Machine Operators may also be known according to the trade name of the transcribing machine as Ediphone operator or Dictaphone operator.

RELATED OCCUPATIONS:

Stenographer
Clerk-Typist

JOB RELATED HIGH SCHOOL SUBJECTS:

Business English
Typing
Business Machines
Machine Transcription

ADDITIONAL INFORMATION:

High school graduates are preferred by employers. Training is obtained from high schools, community colleges, and business schools. Important aptitudes for Transcribing Machine Operators are finger dexterity, accuracy, good hearing, and the ability to concentrate. Employment opportunities are expected to be favorable through the '70s, especially for the Transcribing Machine Operator who can do other office work. Salaries range from approximately $110 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

WAREHOUSEMAN

JOB BRIEF

D.O.T. No: 922.887

D.O.T. Ref: Volume II, Page 360

Revision date: October 1973

THE JOB:

WAREHOUSEMAN: Warehousemen are basically responsible for the storage and movement of materials of all kinds in warehouses or other storage areas.

RELATED OCCUPATIONS:

Box Boy
Shipping and Receiving Clerk
Longshoreman

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

Warehousing requires considerable physical strength but no particular educational background. Those interested in becoming Warehousemen should apply at the local union. No experience is required; however, experienced people may be given preference when work is limited. Applicants must be at least 18 years of age. Applicants receive on-the-job training which includes storage techniques, elementary record keeping and related skills needed for the particular job. Safe working habits and safety regulations are also part of one's on-the-job training. Starting salary is $100 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

WHOLESALE SALESMAN
(General Merchandise)

D.O.T. No: 289.358

D.O.T. Ref: Volume II, Page 488

Revision date: October 1973

THE JOB:

WHOLESALE SALESMAN (General Merchandise): Wholesale Salesmen of general merchandise sell a great variety of items such as shoes, dry goods, notions, and housewares to retail stores. A Wholesale Salesman may specialize in a particular commodity or may sell a variety of goods. Wholesale Salesmen often advise retailers on advertising, pricing, and window and counter displays.

RELATED OCCUPATIONS:

Insurance Agent
Manufacturer's Representative
Exporter/Importer
Securities Agent
Dental and Medical Equipment Salesman

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Business Mathematics
Speech
Sales Course

ADDITIONAL INFORMATION:

This is not usually an entry level position. Salesmen usually begin as stock room clerks and advance to a sales position after several years. A high school education may be required for employment as a Wholesale Salesman. Community college classes in salesmanship and business administration are helpful. Companies that advance their salesmen into managerial positions are beginning to require a college degree in business administration or marketing. Personal characteristics desirable for a Wholesale Salesman are neat appearance, outgoing personality, self-confidence, and persuasive abilities. Beginning salaries for Wholesale Salesmen average about $200 per week. Wholesale Salesmen usually receive a base salary and a commission on the goods sold. These salespersons may work irregular hours.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

COMPUTER TECHNOLOGY

Page

CARD/TAPE CONVERTER OPERATOR 1

COMPUTER INPUT-OUTPUT CONTROL CLERK 2

COMPUTER OPERATOR, TRAINEE 3

COMPUTER-PERIPHERAL EQUIPMENT OPERATOR, TRAINEE 4

DATA PROCESSING EQUIPMENT TECHNICIAN 5

DATA TYPIST 6

ELECTRONICS MECHANIC HELPER (Computer)
see ELECTRICITY/ELECTRONICS, page 12 . . . .

KEYPUNCH OPERATOR, see BUSINESS/CLERICAL/SALES, page 29 . .

OFFICE MACHINE SERVICEMAN, TRAINEE
see ELECTRICITY ELECTRONICS, page 18 . . . .

PROGRAMMER TRAINEE 7

SYSTEMS ANALYST TRAINEE (Business-Electronic
Data Processing) 8

SYSTEMS PROGRAMMER, TRAINEE 9

TABULATING MACHINE OPERATOR 10

TAPE LIBRARIAN 11

CARD/TAPE CONVERTER OPERATOR

JOB BRIEF

D.O.T. No: 213.382
D.O.T. Ref: Volume II, Page 274
Revision date: October 1973

THE JOB:

CARD/TAPE CONVERTER OPERATOR: Card/Tape Converter Operators operate machines which automatically transcribe data from punchcards to reel tapes for use in automatic data processing equipment. Converter Operators may be required to know how to interpret signals from a panel of lights on a machine and to wire a fairly simple plugboard.

RELATED OCCUPATIONS:

Computer-Peripheral Equipment Operator
Digital-Computer Operator
Keypunch Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Business Machines
Typing
Office Practice

ADDITIONAL INFORMATION:

High school graduation and specialized training such as offered by community colleges and proprietary schools, are usually required to be a Card/Tape Converter Operator. Work is specialized and operators spend a majority of their time at their machines. Opportunities for operators are good, but technological changes are expected in computers, thus changes in job requirements for operators will occur. Beginning salaries are $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2

JOB BRIEF

COMPUTER INPUT-OUTPUT
CONTROL CLERK

D.O.T. No: 219.388

D.O.T. Ref: Volume II, Page 276

Revision date: October 1973

THE JOB:

COMPUTER INPUT-OUTPUT CONTROL CLERK: This job concerns the preparation for control, processing, and scheduling of material to be processed by computers. The Control Clerk keeps records of all incoming and outgoing material for the keypunch and tabulating departments.

RELATED OCCUPATIONS:

Accounting Clerk
Bank Clerk
Medical Records Librarian
Computer Operator
Keypunch Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Office Practice
Business Machines
Data Processing
Business Mathematics

ADDITIONAL INFORMATION:

Creativity, accuracy, and responsibility are key personal traits for this occupation. Training programs are offered in high schools and community colleges. The increased use of computer systems within all departments of industry will increase the demand for Control Clerks. Most corporations, hospitals, schools, and large hotel chains employ Control Clerks. Salaries for a 40-hour work week range from $100 to $230 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

COMPUTER OPERATOR, TRAINEE

JOB BRIEF

D.O.T. No: 213.382
D.O.T. Ref: Volume II, Page 274
Revision date: October 1973

THE JOB:

COMPUTER OPERATOR: Computer Operators monitor and control electronic computers to process business, scientific, engineering, or other data. Operators feed information into the computer, set the computer for the program needed, and process the data.

RELATED OCCUPATIONS:

Data Processing Technician
Data Processing Programmer
Keypunch Operator
Tabulating Machine Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Algebra
Data Processing
Business Machines
Typing

ADDITIONAL INFORMATION:

A high school diploma or equivalent is the minimum requirement for entry into this field. Operators are generally required to have 2 years of college education and/or experience for most entry level jobs. It is mandatory that the Computer Operator have quick perceptions, good judgment, and the ability to think logically under pressure. Employment opportunities are good and are expected to continue to increase in the future throughout the country. Salaries range from $100 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

COMPUTER-PERIPHERAL
EQUIPMENT OPERATOR, TRAINEE

JOB BRIEF

D.O.T. No: 213.382

D.O.T. Ref: Volume II, Page 274

Revision date: October 1973

THE JOB:

COMPUTER-PERIPHERAL EQUIPMENT OPERATOR: Computer-Peripheral Equipment Operators run on-line or off-line machines according to instructions to transfer data through digital computers. The operator guides, mounts, sets and positions materials and data through hoppers, readers, sorters, optical scanners, and printing devices.

RELATED OCCUPATIONS:

Card/Tape Converter Operator
Digital-Computer Operator
High-Speed Printer Operator
Keypunch Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Data Processing
Business Machines
General Mathematics
Typing
Office Procedures and Practices

ADDITIONAL INFORMATION:

Most employers require a high school diploma or equivalent for employment. Some employers test applicants for dexterity, interest, and aptitude. Workers spend most of their time at machines and do not meet the public. Some of the tasks currently being done by operators will change as new technology occurs for computers; thus, job requirements will change. However, employment opportunities are good for the near future because of the increasing use of computers. Beginning salary is $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

DATA PROCESSING
EQUIPMENT TECHNICIAN

D.O.T. No: 828.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

DATA PROCESSING EQUIPMENT TECHNICIAN: Data Processing Equipment Technicians install, repair, maintain, and make alterations on all types of electromechanical and electronic data processing equipment such as electronic computers, tabulators, card punchers, sorters, collators, and converters.

RELATED OCCUPATIONS:

Computer Operator
Data Processing Programmer
Office Machine Serviceman
Electronic Technician
Instrument Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Electronics
Physics
Industrial Arts
English
Algebra

ADDITIONAL INFORMATION:

High school graduation and community college or trade school training, are usual educational requirements. Nearly all Data Processing Equipment Technicians begin as trainees and only individuals with some background in electronics will qualify for trainee openings. The rate of growth and opportunities for employment will continue to expand in the 1970s. Salaries for a 40-hour week range from $110 to $220.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

DATA TYPIST
D.O.T. No: 213.588
D.O.T. Ref: Volume II, Page 287
Revision date: October 1973

THE JOB:

DATA TYPIST: Data Typists convert alphabetic, numeric, and symbolic data into coded form on paper tapes. They type both computer programs and input data which a machine converts to holes or magnetic impulses on tapes.

RELATED OCCUPATIONS:

Tabulating Machine Operator
Keypunch Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Data Preparation
Business Machines

ADDITIONAL INFORMATION:

Data Typists usually are required to have a high school diploma and good typing skills. Specific training in data preparation is available in some high schools and many community colleges. Many employers will provide on-the-job training for beginning employees. Electronic computers are housed in air-conditioned, temperature controlled rooms; however, a disadvantage of the working environment is the noise generated by the operation of computer consoles and some auxiliary equipment. Employment opportunities are expected to be favorable throughout the '70s, although some changes in job requirements are expected as changes in technology occur. Salaries for Data Typists range from $90 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PROGRAMMER, TRAINEE

JOB BRIEF

D.O.T. No: 219.388
D.O.T. Ref: Volume II, Page 276
Revision date: October 1973

THE JOB:

PROGRAMMER, TRAINEE: Programmers, often called applications programmers, "speak the language" of computers. They work out the process by which the computer will use the input to produce the output. In doing so, Programmers create step-by-step instructions, called programs, for the computer. These programs are in computer languages such as BASIC or FORTRAN.

RELATED OCCUPATIONS:

Systems Programmer
Computer Input/Output Control Clerk
Computer Electronics Mechanic Helper

JOB RELATED HIGH SCHOOL SUBJECTS:

Mathematics
Data Preparation
Computer Operation

English
Computer Programming
BASIC

ADDITIONAL INFORMATION:

This occupation requires a high school diploma plus technical school or community college training. Many industrial and business firms require Programmer Trainees to have a bachelor's degree. Some employers recruit Programmer Trainees directly from school; however, they usually prefer to hire individuals with one or more years of on-the-job and/or related experience. Employers stress that successful employees in this field need logical minds and a great interest in problem solving. They should enjoy working with details and work well by themselves. Programmer Trainees usually must have 6 to 12 months' experience before they can assume full responsibility as Programmers. Opportunities are good. Salaries range from $110 to $250 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

SYSTEMS ANALYST, TRAINEE
(Business-Electronic Data Processing)

D.O.T. No: 012.168

D.O.T. Ref: Volume II, Page 375

Revision date: October 1973

THE JOB:

SYSTEMS ANALYST (Business-Electronic Data Processing): The Systems Analyst analyzes business problems and systems for inventory control, production, and cost analysis in order to refine these systems and often to convert them to programs for use in electronic data processing systems.

RELATED OCCUPATIONS:

Quality Control Director
Chief Methods Engineer
Data Programmer
Statistician

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Drafting
Physics
Mathematics through Calculus

ADDITIONAL INFORMATION:

An individual wishing to be employed as a Systems Analyst will need at least a 4-year college degree. A Systems Analyst must be able to apply engineering and technical principles as well as organizational ability in the formulation of appropriate systems for the efficient operation of a business enterprise or department. Entry into this occupation is often by advancement from assistant level positions as experience is obtained. Opportunities appear excellent as this is a rapidly growing employment area. Starting salaries range from $770 to $1,150 per month for those with experience.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SYSTEMS PROGRAMMER, TRAINEE

JOB BRIEF

D.O.T. No: 020.188

D.O.T. Ref: Volume II, Page 468

Revision date: October 1973

THE JOB:

SYSTEMS PROGRAMMER, TRAINEE: Systems Programmers design and develop software, also called systems programs, for computer systems. The functions of these programs are to make the computer system operate smoothly and efficiently. Systems Programmers concern themselves with the logic the computer uses to do its job rather than with what it does.

RELATED OCCUPATIONS:

Programmer
Computer Operator
Statistician

JOB RELATED HIGH SCHOOL SUBJECTS:

Mathematics
Data Preparation
Computer Operation
English
Computer Programming
BASIC

ADDITIONAL INFORMATION:

The Systems Programmer must be able to write programs in high level languages such as FORTRAN, COBOL, and BASIC; and also must be skilled in programming in assembly language and machine language. Systems Programmers usually have a college degree in such fields as computer science, mathematics, engineering, physics, or electronics. Training may also be obtained at special data processing schools or individual manufacturer's classes. Opportunities for employment are expected to be favorable throughout the '70s. Starting salaries range from $600 to $675 per month. Salaries can range up to $2,000 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

TABULATING MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 213.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

TABULATING MACHINE OPERATOR: Tabulating Machine Operators operate sorters, collators, reproduction machines, multipliers, interpreters, and tabulators in order to produce a variety of statistical and accounting reports. They operate each machine independently by feeding punched cards into the machine in an established sequence to obtain the desired data output.

RELATED OCCUPATIONS:

Bookkeeping Machine Operator
Data Processing Machine Operator
Computer Operator
Key Punch Operator
Typesetter

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Typing
Computer Operations
Business Machines
Office Practice
Bookkeeping

ADDITIONAL INFORMATION:

It is possible to become a Tabulating Machine Operator directly out of high school. However, chances of finding employment will be improved by community college training in the field or by some business experience in the accounting department of a business. The demand for Tabulating Machine Operators is expected to decrease as more businesses use computers. Tabulating Machine Operators may be tested, especially if employers are interested in finding those who could advance to programmer or analyst with computers. Salaries range from $80 to $90 for beginners, and from $100 to $130 weekly for experienced operators.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

TAPE LIBRARIAN

JOB BRIEF

D.O.T. No: 223.387

D.O.T. Ref: Volume II, Page 271

Revision date: October 1973

THE JOB:

TAPE LIBRARIAN: Tape Librarians classify, catalog, and maintain the library of reels of magnetic or punched paper tape or decks of magnetic tape or punchcards used for electronic data processing purposes. They classify and catalog material according to content, purpose of program, routine or subroutine, and date on which generated. Tape Librarians operate a key punch machine to replace damaged cards.

RELATED OCCUPATIONS:

Film Library Clerk
Automotive-Parts Man
Stock Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Indexing and Filing
Record Keeping
Elements of Data Preparation

ADDITIONAL INFORMATION:

A high school diploma is the minimal requirement for this occupation. Clerical background is also recommended and can be obtained from high school course work, business school, or community college. Starting employees usually receive on-the-job training. Opportunities for employment are good and expected to grow during the '70s. Beginning salaries vary but should be approximately $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

ELECTRICITY/ELECTRONICS

Page

AIR CONDITIONING AND REFRIGERATION MECHANIC 1
CABLE SPLICER HELPER 2
COMMUNICATION MAN (Electronics) 3
CONTROL PANEL ASSEMBLER, see EQUIPMENT INSTALLER . . . .
ELECTRIC MOTOR-CONTROL ASSEMBLER, see EQUIPMENT INSTALLER . .
ELECTRIC-MOTOR REPAIRMAN 4
ELECTRIC TOOL REPAIRMAN, see ELECTRICAL REPAIRMAN . . . . . .
ELECTRICAL-APPLIANCE REPAIRMAN, TRAINEE 5
ELECTRICAL-APPLIANCE SERVICEMAN, TRAINEE 6
ELECTRICAL ENGINEER 7
ELECTRICAL REPAIRMAN 8
ELECTRICIAN HELPER (Construction) 9
ELECTRONICS ENGINEER, see ELECTRICAL ENGINEER . . . .
ELECTRONIC TECHNICIAN 10
ELECTRONICS ASSEMBLER 11
ELECTRONICS MECHANIC HELPER (Computer) 12
ENGINEER, see ELECTRICAL ENGINEER . . . .
EQUIPMENT INSTALLER 13
FURNACE INSTALLER AND REPAIRMAN 14
HEATING MECHANIC, see FURNACE INSTALLER AND REPAIRMAN . . . .
HOUSEHOLD-APPLIANCE INSTALLATION MAN HELPER 15
INSTRUMENT REPAIRMAN HELPER 16
LINEMAN 17
OFFICE MACHINE SERVICEMAN, TRAINEE 18
RADIO ENGINEER (Radio and Television Broadcasting) 19
RADIO MECHANIC, TRAINEE (Airplane) 20
RADIO REPAIRMAN, TRAINEE 21

INDEX

ELECTRICITY/ELECTRONICS

Page

SOLDERER (PRODUCTION LINE) 22

TELEPHONE INDUSTRY FRAMEMAN 23

TELEPHONE REPAIRMAN, see TELEPHONE STATION INSTALLER . . . .

TELEPHONE STATION INSTALLER 24

TELEVISION REPAIRMAN, TRAINEE 25

TESTER, ELECTRONIC SYSTEMS 26

JOB BRIEF

AIR CONDITIONING AND
REFRIGERATION MECHANIC
D.O.T. No: 637.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

AIR CONDITIONING AND REFRIGERATION MECHANIC: Air Conditioning and Refrigeration Mechanics and repairmen are skilled workers who install and repair air conditioning and refrigeration equipment in homes, office buildings, factories, food stores, restaurants and other establishments.

RELATED OCCUPATIONS:

Draftsman
Sheet Metal Worker
Electronic Technician
Plumber
Appliance Serviceman

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Electricity
Mechanical Drawing
Metals Shop
Physics (applied or practical)

ADDITIONAL INFORMATION:

A high school diploma is required to enter this occupation. The young man interested in this field should begin by getting a job in a shop, and if the employer feels he has a future in this line of work, the employer will make the necessary arrangements to get him into the union as an apprentice. The apprenticeship training for this job is divided under two separate unions. The Air Conditioning Mechanic trains with the Sheet Metal Joint Apprenticeship Committee while the Refrigeration Mechanic is a member of the Plumbers Joint Apprenticeship Committee. The training programs run from 4 to 5 years. Employment prospects are poor even though employers feel the field is rapidly expanding. Non-union shops often offer their own training programs. Journeymen make from $240 to $340 per week. Apprentices start at about $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

CABLE SPLICER HELPER

D.O.T. No: 829.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

CABLE SPLICER: Cable Splicers connect lengths of cable together, a wire at a time, to give continuity to each circuit. Cable Splicers take smaller cables off the main cable to provide neighborhood and individual customer service, install the related hardware, and repair and maintain cable lines.

RELATED OCCUPATIONS:

Telephone Lineman
Telephone Supplyman
Telephone Frameman
Equipment Installer
Precision Assembler

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Metal Shop
Electricity
Electronics

ADDITIONAL INFORMATION:

A high school diploma or equivalent is the minimum educational requirement for employment as a Cable Splicer. Splicers work with the lineman as a team. This is a good job for an individual who enjoys the outdoors. The Cable Splicer works wherever telephones need to be installed and actually does the preliminary work for the telephone installations. The job involves some heavy physical work; previous electrical experience is helpful. Men engaged in this work may advance to assistant engineer. This field is wide open, and there is an increasing demand for men in this occupation. However, in strained economic conditions this market becomes tightly closed and competition for jobs extremely high. Salaries for a 40 hour week range from $130 to $210.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

COMMUNICATION MAN (Electronics)

D.O.T. No: 822.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

COMMUNICATION MAN (Electronics): Communication Men, also known as communication equipment men, install, repair, and adjust communication equipment such as public address and intercommunication systems, wired burglar alarms, switchboards, telegraphs, telephones, and related apparatus. They install equipment according to layout plans and connect units with inside or outside service wires. Communication Men may repair cables, lay out plans for new equipment, and estimate material required.

RELATED OCCUPATIONS:

Central Office Repairman (Telephone and Telegraph)
Equipment Installer
Cable Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
General Industrial Arts
Basic Electricity/Electronics
Principles of AM, FM Receivers
Blueprint Reading

ADDITIONAL INFORMATION:

A high school diploma or equivalent is required for entry into this occupation. Individuals with background course work or experience in electricity/electronics are preferred. Generally pre-employment tests to determine an applicant's mechanical abilities are given by employers. Training can be obtained from technical schools, regional occupational centers, and community colleges. On-the-job training is usually provided to entry workers until proficiency in the skills of the job are obtained. It takes approximately 2 to 4 years to become a skilled Communication Man. Opportunities are expected to increase at a moderate rate during the '70s. Salaries for entry level workers range from $105 to $110 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

ELECTRIC-MOTOR REPAIRMAN

JOB BRIEF

D.O.T. No: 721.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

ELECTRIC-MOTOR REPAIRMAN: Electric-Motor Repairmen, also known as small motor repairmen, repair small (fractional horsepower) electric motors using hand tools, coil-winding machines, and testing equipment.

RELATED OCCUPATIONS:

Electrical Repairman
Electrical-Appliance Serviceman
Electric-Tool Repairman
Automotive-Generator-and-Starter Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
General Industrial Arts
Blueprint Reading
Basic Electricity/Electronics
Industrial Control Systems

ADDITIONAL INFORMATION:

High school graduation is generally required by employers of Electric-Motor Repairmen. Training courses in electrical repair are offered by community colleges, trade schools, and the armed forces. Training may also be obtained through apprenticeships, usually lasting 2 to 4 years. Opportunities are expected to increase during the '70s. Salaries range from $120 to $180 per week depending on the geographical location of the job and type of industry.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

ELECTRICAL-APPLIANCE REPAIRMAN, TRAINEE

JOB BRIEF

D.O.T. No: 723.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

ELECTRICAL-APPLIANCE REPAIRMAN: Electrical-Appliance Repairmen, also known as small appliance repairmen, repair electrical appliances such as toasters, cookers, percolators, lamps, and irons, using hand tools and electrical testing instruments. They test wiring using voltmeters, ohmmeters, and other circuit testers and they replace defective wiring and parts using soldering iron and spot welding equipment.

RELATED OCCUPATIONS:

Vacuum-Cleaner Repairman
Radio and Television Repairman
Air-Conditioning/Refrigeration Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
General Industrial Arts
Blueprint Reading
Welding
Electricity

ADDITIONAL INFORMATION:

A high school diploma and basic knowledge of electricity is generally required for the job. Training is presently available through some community colleges, regional occupational centers, technical schools, and high schools. Electrical-Appliance Repairmen usually are hired as helpers and receive on-the-job training and experience for 1 to 2 years before becoming fully qualified. Most Repairmen are employed in independent repair shops and service centers of retail establishments or service centers operated by appliance manufacturers. Employment opportunities are expected to grow during the '70s. Beginning salaries for Electrical-Appliance Repairmen range from $80 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

ELECTRICAL-APPLIANCE SERVICEMAN, TRAINEE

D.O.T. No: 827.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

ELECTRICAL-APPLIANCE SERVICEMAN: Electrical-Appliance Servicemen, also known as appliance-service representatives, install, service, and repair large appliances such as stoves, refrigerators, dishwashing machines, washing machines, and clothes-drier machines. They use hand tools and test meters and follow wiring diagrams and manufacturer's specifications in their work.

RELATED OCCUPATIONS:

Refrigeration Mechanic
Household-Appliance Installation Man
Control Panel Assembler

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Blueprint Reading
General Industrial Arts
Electricity

ADDITIONAL INFORMATION:

Usually employers hire high school graduates as helpers and provide supervised on-the-job training. Training may also be obtained from community colleges, technical schools, high schools, and regional occupational centers. Electrical-Appliance Servicemen usually need up to 3 years of on-the-job experience to become fully qualified. Often companies provide training programs ranging from evening programs offered by a major distributor to high-pressure courses lasting several weeks. Opportunities are expected to grow during the '70s. Beginning salaries range from $80 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

ELECTRICAL ENGINEER

JOB BRIEF

D.O.T. No: 003.081

D.O.T. Ref: Volume II, Page 371

Revision date: October 1973

THE JOB:

ELECTRICAL ENGINEER: Electrical Engineers plan, design, and oversee the manufacture and operation of various kinds of electrical and electronic equipment. Usually they specialize in one area, such as communications, electronics, or power.

RELATED OCCUPATIONS:

Mechanical-Engineering Technician
Nuclear Engineer
Civil Engineer
Aeronautical Engineer
Electronic Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Physics
Drafting
Chemistry
Electronics
Electricity

ADDITIONAL INFORMATION:

A bachelor's degree in engineering is necessary for most positions; however, a master's degree or doctor's degree may be required for supervisory or administrative positions. Most Electrical Engineers are employed in private industry, although there are some positions in governmental agencies. Employment opportunities are expected to increase rapidly in the '70s. Starting salaries for Electrical Engineers range from $750 to $940 per month depending on location and type of employment.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

ELECTRICAL REPAIRMAN

JOB BRIEF

D.O.T. No: 829.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

ELECTRICAL REPAIRMAN: Electrical Repairmen or Maintenance Electricians are skilled Electricians who, using preventive techniques, keep electrical systems working properly and when malfunctions do occur, perform the necessary repairs. Electrical Repairmen repair such electrical systems and equipment as transformers, wiring, alarm systems, and switches.

RELATED OCCUPATIONS:

Electrical-Appliance Serviceman
Construction Electrician
Telephone Repairman
Electric Tool Repairman
Electric Motor Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Industrial Arts
Metal Shop
Electricity
Electronics

ADDITIONAL INFORMATION:

There are limited opportunities for the high school and community college graduates in this field. Training is sometimes offered in areas where heavy industry is located although employers cannot always agree on basic training programs since each company has specialized needs. An older, more experienced journeyman electrician can be trained quickly and efficiently on the job by individual companies. This is usually a union job. Salaries range from $120 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

ELECTRICIAN HELPER (Construction)

D.O.T. No: 824.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

ELECTRICIAN (Construction): Electricians lay out, assemble, install and test electrical fixtures, apparatus, and wiring used in electrical systems in all types of structures.

RELATED OCCUPATIONS:

Electrical Repairman
Electric Distribution Checker
Building Inspector (Electrical)
Salesman (Electrical)

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Electricity
Mechanical Drawing
Drafting
Industrial Arts

ADDITIONAL INFORMATION:

This is an apprenticeable occupation. The apprenticeship takes 4 years and beginners start at approximately 40% of a journeyman wage. Applicants are approved by an apprenticeship council which is composed of members of labor as well as management. Because of the good pay, competition for apprenticeship is keen; consequently, opportunities are best for those with a high school or community college education. The future appears to be good for Electricians. The number of Electricians needed is expected to rise due to continued construction and the increased use of electrical power. Apprentices start at $130 per week. As journeymen, Electricians earn from $250 to $280 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

ELECTRONIC TECHNICIAN

D.O.T. No: 003.181

D.O.T. Ref: Volume II, Page 379

Revision date: October 1973

THE JOB:

ELECTRONIC TECHNICIAN: Electronic Technicians aid the Electronic Engineer. They apply electronic theory, principles of electrical circuits, electrical testing procedures and related subjects to layout, build, test, troubleshoot, repair and modify various electronic equipment.

RELATED OCCUPATIONS:

Data Processing Technician
Electronics Assembler
Systems Engineer
Draftsman
Electronics Engineer
Engineering, Electronic Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Algebra
Geometry
Physics
Electronics
Electricity

ADDITIONAL INFORMATION:

This occupation requires at least several years of electronics training at a community college or a technical school. These individuals are always in demand and companies state that they have positions for Electronic Technicians that they have been unable to fill due to lack of trained personnel. Salary is $650 per month to start.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

ELECTRONICS ASSEMBLER

JOB BRIEF

D.O.T. No: 726.781

D.O.T. Ref: Volume II, Page 319

Revision date: October 1973

THE JOB:

ELECTRONICS ASSEMBLER: Electronics Assemblers install components and subassemblies in electronic equipment of all kinds using diagrams and tools of many types.

RELATED OCCUPATIONS:

Radio and TV Repairman
Spot Welder
Electronics Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

Electronics
Electrical Shop
Mechanical Drawing
Metal Shop

ADDITIONAL INFORMATION:

Electronics Assemblers usually must have a high school diploma or its equivalent. Entrance requirements are about the same for all employers of Electronics Assemblers. Manual dexterity is a must. Most companies offer their own "in house" training programs. Training is also available through MDTA programs and at some community colleges. Starting salary is $130 per week and goes up to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

ELECTRONICS MECHANIC HELPER (Computer)

D.O.T. No: 828.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

ELECTRONICS MECHANIC HELPER (Computer): Electronics Mechanic Helpers assist Electronics Mechanics in repairing electronic computers and computer peripheral equipment according to manufacturer's specifications, using hand tools and test instruments. They help test electronic components and circuits to locate defects using instruments such as oscilloscopes, signal generators, ammeters, and voltmeters.

RELATED OCCUPATIONS:

Office Machine Serviceman
Component Inspection Technician
Electronic Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
General Industrial Arts
Blueprint Reading
Basic Electricity/Electronics
Logic Systems
Integrated Circuits
Elements of Data Preparation and Computer Operation

ADDITIONAL INFORMATION:

A high school diploma and 2 to 4 years specific vocational training is required to be an Electronics Mechanic. The Electronics Mechanic Helper is an entry job leading to the job of Electronics Mechanic. Preparatory electronics course work can be obtained from regional occupational centers, community colleges, and high schools. Applicants should enjoy working from schematic drawings. Opportunities for employment are expected to increase rapidly with the increase in the use of computers. Beginning salaries of Electronics Mechanic Helpers range from $110 to $125 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

EQUIPMENT INSTALLER

JOB BRIEF

D.O.T. No: 829.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

EQUIPMENT INSTALLER: Equipment Installers install electronic control panels and mechanical equipment such as motor generator units, battery chargers, utility reels, and darkroom equipment. They may install this equipment in panel trucks and/or business offices. Some Equipment Installers work exclusively installing telegraphic transmitting and receiving equipment in telegraph company offices and on telegraph company customers' premises.

RELATED OCCUPATIONS:

- Cable Splicer
- Electrical Motor-Control Assembler
- Communications Man (Electronics)
- Electrical Repairman
- Control Panel Assembler

JOB RELATED HIGH SCHOOL SUBJECTS:

- Shop Mathematics
- General Industrial Arts
- Basic Electricity/Electronics
- Blueprint Reading

ADDITIONAL INFORMATION:

High school graduation is usually a minimum requirement for entry into this field. Courses in industrial control panels and transistor circuits are recommended. Applicants should be in good physical condition because installers are often moving equipment weighing 50 to 100 pounds or more. On-the-job training is provided and entry workers are supervised by a skilled worker from 2 to 4 years or until proficiency skills are obtained. Opportunities are expected to increase moderately during the '70s. Beginning salaries range from \$110 to \$120 per week. Skilled Equipment Installers' salaries range from \$180 to \$210 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

FURNACE INSTALLER AND REPAIRMAN

JOB BRIEF

D.O.T. No: 869.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

FURNACE INSTALLER AND REPAIRMAN: Furnace Installers and Repairmen, also called Heating Equipment Mechanics, install and repair oil, gas, and electric heating units, following blueprints or other specifications. They install fuel pipes, air ducts, pumps, and other components; connect electrical wiring and controls; and check the heating unit for proper operation.

RELATED OCCUPATIONS:

Air Conditioning and Refrigeration Mechanic
Sheet Metal Worker

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Metal Shop

Electricity
Mechanical Drawing

ADDITIONAL INFORMATION:

. A high school diploma is generally required to enter this field. Most Furnace Installers start as helpers and acquire their skills by working for several years with experienced mechanics. Salaries for Furnace Installers range from $130 to $280 per week depending on level of skill, type of equipment worked on and geographic area.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

HOUSEHOLD-APPLIANCE INSTALLATION MAN HELPER
D.O.T. No: 827.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

HOUSEHOLD-APPLIANCE INSTALLATION MAN: Household-Appliance Installation Men, also known as installation men, install gas and electric household appliances such as refrigerators, washing machines, stoves, and television receiving sets in homes of customers. They level and adjust refrigerator doors, connect water pipes, light and adjust pilot lights, examine gas valves, and may install television converters and antennas.

RELATED OCCUPATIONS:

Electrical-Appliance Repairman
Air-Conditioning-Unit Tester
Equipment Installer

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Electricity/Electronics
Shop Mathematics
General Industrial Arts
Welding

ADDITIONAL INFORMATION:

Employers will hire high school graduates with basic tool handling abilities and a good foundation in electricity/electronics. Training for Household-Appliance Installation Men is available at technical schools, community colleges, and at some high schools and regional occupational centers. Installation men usually are hired as helpers and are supervised closely for 6 to 12 months. Individuals interested in this field should be in good physical condition and be able to work with little direct supervision. Opportunities for employment are expected to grow during the '70s. Beginning salaries range from $80 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

INSTRUMENT REPAIRMAN HELPER

JOB BRIEF

D.O.T. No: 710.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

INSTRUMENT REPAIRMAN HELPER: Instrument Repairmen Helpers assist instrument repairmen in maintaining complex industrial and scientific instruments that measure, record, or control variables such as heat, electricity, pressure, liquid flow, and chemical composition. One of many duties of Instrument Repairmen Helpers is to observe operating conditions of instruments and report to the instrument repairman any abnormalities.

RELATED OCCUPATIONS:

Instrument Repairman
Calibrator
Electronic Systems Tester

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
General Industrial Arts
Blueprint Reading
Basic Electricity/Electronics
Logic Systems
Transistor and Integrated Circuits

ADDITIONAL INFORMATION:

Although high school graduation is not required, it is recommended for advancement in this field. On-the-job training for Instrument Repairman Helpers usually lasts from 6 months to 1 year. Additional course work and experience can lead to advancement to the job of an instrument repairman. Individuals planning a career as instrument repairmen must have mechanical aptitude and above average ability to read manuals and schematic drawings. Employment opportunities exist with manufacturers of instruments and industrial controls, gas and electric firms, as well as petroleum and chemical plants. Opportunities are expected to be good throughout the '70s. Beginning salaries are approximately $100 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

LINEMAN

JOB BRIEF

D.O.T. No: 821.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

LINEMAN (Electric Power and Communications): Linemen with both the electric power and communications industries are responsible for the installation and maintenance of power lines which carry power and telephone messages to homes and businesses. Linemen string wire from telephone poles; lay underground cables; dig holes with power-driven equipment; help set telephone poles; operate heavy-duty trucks, power lifts and related equipment; and repair and maintain existing telephone lines.

RELATED OCCUPATIONS:

Telephone Frameman
Cable Splicer
Telephone Supplyman
Radio Instrument Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Industrial Arts
Electricity

ADDITIONAL INFORMATION:

This occupation requires that the applicant have a high school education or its equivalent, be 18 years of age and have good physical coordination. Mechanical aptitude and dexterity in the use of tools is desirable. The Lineman must not be color blind nor be afraid of heights because much of his work is performed from telephone poles. Complete training in company-operated schools with on-the-job supervision is given. Opportunities exist in the light and power and telephone industries in all areas. Opportunities are not expected to increase greatly because new techniques may eliminate the use of power lines in the future. Salaries for a 40-hour week range from $130 to $200.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

OFFICE MACHINE SERVICEMAN, TRAINEE
D.O.T. No: 633.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

OFFICE MACHINE SERVICEMAN: Office Machine Servicemen inspect, adjust, repair, and clean machines such as typewriters, duplicating machines, and calculators. They may specialize in one machine and be called, for example, Typewriter Serviceman.

RELATED OCCUPATIONS:

Appliance Technician
Coin-Vending Machine Mechanic
Small Appliance Repairman
Assembly Worker
Service Manager
Office Machine, Salesman

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Electronics/Electricity
Business Machines
Basic Mathematics
Typing

ADDITIONAL INFORMATION:

Employers may test applicants. IBM's test is a fifteen question test covering a knowledge of basic mechanics, physics, and electronics. The field is open to students immediately out of high school. The companies provide good training programs. This is an occupation in which workers are in demand, and future prospects are excellent. In addition to mechanical and electronic skills, these servicemen must be able to meet the public, be neat in appearance, be courteous, and have a good command of English. Salaries range from $120 to $170 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

RADIO ENGINEER
(Radio and Television Broadcasting)
D.O.T. No: 003.187
D.O.T. Ref: Volume II, Page 381
Revision date: October 1973

THE JOB:

RADIO ENGINEER (Radio and Television Broadcasting): Radio Engineers operate and maintain audio and video transmission equipment in compliance with federal regulations. They also tune the transmitter for efficient operation, diagnose causes of malfunctions and oversee technicians who are adjusting and repairing station equipment.

RELATED OCCUPATIONS:

Power Electrical Engineer
Radio Repairman
Radio Announcer

JOB RELATED HIGH SCHOOL SUBJECTS:

Electricity/Electronics
Mathematics

ADDITIONAL INFORMATION:

Community college training in electronics and radio and television broadcasting is required as is a Federal Communications Commission Radiotelephone First Class Operator License. Courses for the license are usually available at both community colleges and technical schools. The number of Radio Engineers is expected to increase only slightly during the '70s. Earnings of Radio Engineers vary greatly depending on size and location of the station and the community. Salaries range from $225 to $365 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

RADIO MECHANIC, TRAINEE (Airplane)
D.O.T. No: 823.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

RADIO MECHANIC (Airplane): Radio Mechanics install, maintain, repair, and test all aircraft radio equipment in accordance with diagrams and airline specifications.

RELATED OCCUPATIONS:

Airplane Mechanic
Appliance Technician
Instrument Technician
Radio Instrument Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Electricity/Electronics
Blueprint Reading
Radio/TV Repairs

ADDITIONAL INFORMATION:

At least 3 years of on-the-job training and study is usually required to become a Radio Mechanic. Training time varies according to previous experience and individual ability. A high school diploma is usually required. An FCC Radio-Telephone Operator's license is required. Some community colleges offer courses in preparation for the FCC examination. Operators must be able to work around the noise of jet engines and power repair tools; work with little or no supervision; and read blueprints and diagrams. A Radio Mechanic can advance to ground radio operator or instrument technician. Both jobs can lead to the job of flight engineer and supervisory positions. Salaries for a 40 to 48-hour work week range from $150 to $270.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

RADIO REPAIRMAN, TRAINEE

JOB BRIEF

D.O.T. No: 720.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

RADIO REPAIRMAN, TRAINEE: Radio Repairmen use their knowledge of electronic circuitry to make repairs on radio receivers, phonographs, recorders, and other electronic-audio equipment. They test circuits, tubes, resistors and other parts, using electronic test equipment such as voltmeters and oscilloscopes to locate defects. Radio Repairmen may install automobile radios.

RELATED OCCUPATIONS:

Electronic Technician
Electrical Repairman
Television Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Electricity/Electronics
Mechanical Drawing
Radio Repairing

ADDITIONAL INFORMATION:

High school graduation is required for employment in the radio repair field. Radio Repairmen can receive their training at technical schools, high schools, or regional occupational centers. The military service offers training and work experience that is helpful in this field. From 2 to 4 years of experience and on-the-job training is required to be a qualified Radio Repairman. Opportunities for employment are expected to be good throughout the '70s. Salaries range from $150 to $280 per week depending on skill level and geographical location.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SOLDERER (PRODUCTION LINE)

JOB BRIEF

D.O.T. No: 814.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

SOLDERER (PRODUCTION LINE) Production Line Solderers join together components of metal products on a production line, using a hand soldering iron and soft solder. Solder is the metallic alloy used to mend or join metallic surfaces. It is the primary method used for connecting wires and components in electronic devices.

RELATED OCCUPATIONS:

Brazer, Assembler
Welder Helper

JOB RELATED HIGH SCHOOL SUBJECTS:

Welding
Electricity/Electronics

ADDITIONAL INFORMATION:

A high school diploma is required for this job. Training may be obtained at high schools or technical schools. Beginning on-the-job training is also available at some companies. Production Line Solderers must have good eye-hand coordination, be able to work rapidly and accurately, and follow both oral and written instructions. Beginning salaries are approximately $115 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

138

JOB BRIEF

TELEPHONE INDUSTRY FRAMEMAN

D.O.T. No: 822.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

TELEPHONE INDUSTRY FRAMEMAN: Telephone Industry Framemen work in central offices disconnecting, changing, and connecting customer's lines to switchboard equipment.

RELATED OCCUPATIONS:

Telephone Lineman
Cable Splicer
Telephone Supplyman
Radio Instrument Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Physical Sciences
Industrial Arts
Electricity

ADDITIONAL INFORMATION:

This occupation requires a high school education or its equivalent. A basic knowledge of electricity is desirable. The employee should be able to define color differences and be dexterous in the use of small tools. The job involves connecting and disconnecting telephone lines from switching equipment, testing customers' lines, and connecting wires to proper terminals and soldering connections. The Frameman works inside the central office with much of his time devoted to repairs and preventive maintenance. The training involves on-the-job instruction. Since this is an entry level job, there are usually job openings due to promotion; however, adverse economic conditions make competition for jobs extremely high. Salaries for a 40-hour week range from $130 to $170.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

TELEPHONE STATION INSTALLER

JOB BRIEF

D.O.T. No: 822.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

TELEPHONE STATION INSTALLER: Telephone Station Installers are skilled employees of telephone companies who install telephones and related equipment in homes.

RELATED OCCUPATIONS:

Communications Engineer
Equipment Inspector
Station Repairman
Lineman
Electronic Technician
Telephone Serviceman

JOB RELATED HIGH SCHOOL SUBJECTS:

Electricity
Speech

ADDITIONAL INFORMATION:

This job classification sometimes is known as installer repairman. One should have a high school diploma or equivalent. An entrance test is given to a prospective employee. Complete training in company-operated schools is given with on-the-job supervision. This occupation requires good verbal skills. It is one of the better starting positions since it offers the employee, who meets the public well, excellent advancement opportunities to become a foreman or supervisor. It should be noted that if a high school graduate is accepted for employment and then is called for military duty, upon returning to the company the man is given wage credit for the time he spent in the service. Salaries range from $130 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

TELEVISION REPAIRMAN, TRAINEE

JOB BRIEF

D.O.T. No: 720.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

TELEVISION REPAIRMAN, TRAINEE: Television Repairmen repair and adjust radios and television receivers, using hand tools and electronic testing instruments. They tune receivers, adjust controls for desired density, linearity, focus and size of picture. They also test circuits and components and replace faulty components.

RELATED OCCUPATIONS:

Radio Repairman
Electronic Technician
Electrical Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Electricity/Electronics
Television Repairing
Mechanical Drawing

ADDITIONAL INFORMATION:

High school graduation is required for employment in the television repair field. Training can be obtained from high schools, technical schools, or regional occupational centers. The military also offers training and experience that is helpful in this field. Electronics and mathematics are recommended courses of study. To be a skilled Television Repairman usually takes from 2 to 4 years of on-the-job training and experience after school training. Opportunities for employment are expected to increase during the '70s. Salaries range from $150 to $280 per week depending on skill level, place of employment and geographical location.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

TESTER, ELECTRONIC SYSTEMS

D.O.T. No: 729.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

TESTER, ELECTRONIC SYSTEMS: Electronic Systems Testers examine assembled electronic units such as radio and television transmitters and computer memory units to make certain that they conform to blueprints and specifications. They also check wire routing, electrical connections, and quality of units. Testers use such tools as micrometers, calipers, spectrum analyzers, voltmeters, and magnifying glasses in their work.

RELATED OCCUPATIONS:

Electrical Equipment Tester (Aircraft)
Electronic Production Repairman
Cable Wireman

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Electricity
Mechanical Drawing
Electronics

ADDITIONAL INFORMATION:

A high school diploma is generally required by employers. Most Electronic Systems Testers receive other specialized training from community colleges, technical schools or the armed forces. Training may also be obtained through apprenticeships usually 2 or 3 years duration and then advancement to a job such as electronics technician. Opportunities for employment are projected to be good throughout the '70s. The salary for Electronic Systems Testers is approximately $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

INDEX

GRAPHIC COMMUNICATIONS

Page

BINDERY WORKER 1
BLUEPRINTING MACHINE OPERATOR 2
COMPOSITOR, see TYPESETTING MACHINE OPERATOR . . . .
COPY READER 3
COPYWRITER 4
DARKROOM TECHNICIAN 5
DRAFTSMAN, TRAINEE 6
DUPLICATING MACHINE OPERATOR 7
ILLUSTRATOR, TRAINEE 8
JOB PRINTER, TRAINEE 9
LINOTYPE OPERATOR 10
LITHOGRAPHER 11
LITHOGRAPHIC CAMERAMAN 12
LITHOGRAPHIC (OFFSET) PRESSMAN 13
MIMEOGRAPH OPERATOR, see DUPLICATING MACHINE OPERATOR . .
MULTILITH OPERATOR 14
PHOTOENGRAVER 15
PHOTOGRAPHER, TRAINEE 16
PRINTING PRESSMAN 17
PROCESS ARTIST, TRAINEE (Printing and Publishing) 18
PROOF PRESSMAN 19
SILK-SCREEN PRINTER 20
STRIPPER, TRAINEE 21
TAPE PERFORATOR 22
TECHNICAL ILLUSTRATOR, TRAINEE 23
TECHNICAL TYPIST, see BUSINESS/CLERICAL/SALES
page 48 . . . .
TYPESETTING MACHINE OPERATOR 24

BINDERY WORKER

JOB BRIEF

D.O.T. No: 643.885

D.O.T. Ref: Volume II, Page 447

Revision date: October 1973

THE JOB:

BINDERY WORKER: Bindery Workers perform hand and machine work required in the process of producing bound printed material of all kinds.

RELATED OCCUPATIONS:

Packaging Worker
Printing Pressman

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Machine Shop
Graphic Arts

ADDITIONAL INFORMATION:

Employers prefer high school graduates directly out of high school. There is a moderate demand for Bindery Workers. Opportunities are greatest in the large metropolitan areas. Applicants will receive on-the-job training informally or as an apprentice in a 5 year program. In some cases Bindery Workers have to join a union. Apprentices may learn the entire business or specialize in one operation depending on ability, interest, and ambition. The pay ranges from $70 to $170 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

BLUEPRINTING MACHINE
OPERATOR

D.O.T. No: 979.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

BLUEPRINTING MACHINE OPERATOR: Blueprinting Machine Operators reproduce copies of drawings, charts, graphs, and similar documents by the contact exposure method using a blueprinting machine that exposes, develops, and dries duplicate copies automatically.

RELATED OCCUPATIONS:

Linotype Operator
Offset Pressman

JOB RELATED HIGH SCHOOL SUBJECTS:

Graphic Arts
Industrial Arts

ADDITIONAL INFORMATION:

A high school diploma or its equivalent is usually required for this occupation. Community colleges usually offer basic courses in graphic arts and machine technology which may provide the student with a basic understanding of machinery and its operation. There is no formal apprenticeship program. A beginner can become adept at running the blueprinting machine in 2 weeks to 4 months, depending upon experience and aptitude with machines of this type. Operators must be able to follow oral and written instructions, adjust to routine working situations, and concentrate under noisy conditions. Union membership may be required. There is not much demand for Blueprinting Machine Operators. The turnover is low. Some operators become foremen, and others go into business for themselves. Salaries range from $80 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

COPY READER

D.O.T. No: 132.288

D.O.T. Ref: Volume II, Page 528

Revision date: October 1973

THE JOB:

COPY READER: Copy readers rewrite, edit and correct newspaper, magazine, and book manuscripts. They generally edit all material to be published, screening copy for grammatical correctness, spelling, preciseness of wording and possible libel. They may also verify statements, rewrite certain copy lacking interest, cohesiveness or "punch."

RELATED OCCUPATIONS:

Editorial Writer
Critic
Reporter
Editing Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Graphic Arts
English
Creative Writing
Journalism

ADDITIONAL INFORMATION:

A high school diploma is the minimum requirement for Copy Readers. Usually college training is also required; for example, many employers prefer applicants with bachelor's degrees in journalism, business, liberal arts, marketing, or advertising. Copy Readers are employed by newspapers, magazine printing and publishing firms, and advertising firms. Individuals interested in this field should attempt to gain as much experience as possible in school publications, reading and writing stories, poems, plays and any work with marketing research. Copy Readers should have the ability to express themselv clearly, concisely and correctly and have an excellent feeling for word nuanc Opportunities for employment are favorable but will increase slowly during the '70s. Salaries for Copy Readers vary greatly according to geographical location, type of firm, and the individual's past experience, but approximate $125 to $235 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

COPYWRITER

JOB BRIEF

D.O.T. No: 132.088
D.O.T. Ref: Volume II, Page 524
Revision date: October 1973

THE JOB:

COPYWRITER: Copywriters are specialized writers who create original advertising copy about particular products, services, or institutions for newspapers, radio, television, outdoor posters, magazines, direct mail, and other media.

RELATED OCCUPATIONS:

Advertising Salesperson
Journalist
Layout Man
Account Executive
Production Manager
Commercial Artist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Journalism
Graphic Arts
Salesmanship
Photography
English
School Newspaper and Yearbook

ADDITIONAL INFORMATION:

It is very difficult to find work as a Copywriter right out of high school. A bachelor's degree with a major in advertising or journalism is recommended. Applicants should be inquisitive, know what people want, and have a flair for words. Experience in working on school newspapers often proves to be an asset as it sometimes provides an acquaintance with agencies and retail stores for gaining employment. Most job opportunities are in metropolitan areas. Salaries begin for Copywriters at $550 monthly and may rise to $1500 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

DARKROOM TECHNICIAN
D.O.T. No: 976.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

DARKROOM TECHNICIAN: The Darkroom Technician, who may also be known as darkroom attendant or developer, works in a photographic darkroom where he develops, fixes, and prints various types of exposed photographic film.

RELATED OCCUPATIONS:

Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Chemistry
Photography
Industrial Arts

ADDITIONAL INFORMATION:

Most employers require high school graduation. Completion of community college level courses in this field is helpful to people interested in supervisory and managerial jobs in photographic laboratories. Business is looking for those with artistic and creative talents. Ambition and responsibility are important. Prospects for the well-trained Darkroom Technician are increasing at a moderate rate with the increasing use of a variety of printed matter using illustrations done from photographs and with more people making photography a hobby. Salaries range from $90 to $250 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

DRAFTSMAN, TRAINEE

JOB BRIEF

D.O.T. No: 017.281

D.O.T. Ref: Volume II, Page 377

Revision date: October 1973

THE JOB:

DRAFTSMAN: Draftsmen are essential in industry where fabricated parts and assemblies are developed. They may work in electrical, mechanical, architectural, or any other media departments. Draftsmen have the task of conveying design ideas to paper with precision, clarity, and dispatch.

RELATED OCCUPATIONS:

Technical Illustrator
Engineer
Mapper
Architect

JOB RELATED HIGH SCHOOL SUBJECTS:

Mechanical Drawing
Physical Science
Art
Mathematics
Industrial Arts

ADDITIONAL INFORMATION:

This occupation is open to qualified high school graduates, both men and women. School achievement and past experience are considered in screening job applicants. Employers may also request samples of an applicant's work. Neatness in work and the ability to work with three-dimensional concepts and spatial relationships are essential. Some on-the-job training is available, and some employers encourage additional education at local community colleges. At the present time, turnover is slow, and available jobs are open mainly to qualified Designer Draftsmen. Starting salaries for trainees are $120 and for journeymen $180 per week. With a bachelor's degree, salaries range from $220 to $280 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

DUPLICATING MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 207.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

DUPLICATING MACHINE OPERATOR: Duplicating Machine Operators operate offset duplicating machines. They are clerical workers who work in many types of offices and the printing and publishing industry. They reproduce single and multicolor copies on specialized machines. Operators are also likely to operate other machines such as collators, cutting and perforating machines, enlargers, plate burners, photocopy, and stencil process machines.

RELATED OCCUPATIONS:

General Office Clerk
Tabulating Machine Operator
Blueprinting Machine Operator
Lithographic-Offset Pressman
Proof Pressman

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Basic Clerical Training
Typing
Duplicating Machines
Graphic Arts

ADDITIONAL INFORMATION:

A high school diploma is usually required by employers of Duplicating Machine Operators. Training may be obtained from business, technical, or community colleges. Courses and experiences in office machines and graphic arts would be beneficial for employment. On-the-job training usually lasts up to a year and includes all phases of machine operation and care. Opportunities for employment are greatest in large cities where large business or printing and publishing companies are located. Salaries usually range from $85 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

ILLUSTRATOR, TRAINEE
D.O.T. No: 141.081
D.O.T. Ref: Volume II, Page 232
Revision date: October 1973

THE JOB:

ILLUSTRATOR, TRAINEE: Illustrator Trainees draw and paint illustrations for advertisements, books, magazines, billboards, and other such media which need embellishment or illumination. They study the design layout and select the technique which will best produce the desired visual effect and conform to the printing method specified. The Illustrator may work alone or with a team of artists to complete a required assignment.

RELATED OCCUPATIONS:

Commercial Artist
Draftsman
Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Graphic Communications
Drafting

ADDITIONAL INFORMATION:

A high school education is desirable, especially if one wishes to take classes in an art school or institute. Artistic ability and good taste are the most important qualifications for an Illustrator Trainee; but it is essential that these qualities be developed by studying the specialized techniques of commercial and applied art. Employment and advancement opportunities for talented, well-trained illustrators are expected to be favorable in the '70s. Illustrators with no training beyond high school vocational training may earn from $70 to $75 a week. Talented artists with professional post-high school training and a good portfolio and several years of experience may expect to earn $125 to $175 or more weekly.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB PRINTER, TRAINEE

JOB BRIEF

D.O.T. No: 973.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

JOB PRINTER: Job Printers, also known as country printers, set type according to copy and operate a cylinder or automatic platen press to print complete orders. Job printers thus perform all work necessary to complete an order from setting type to proof reading to printing finished copy.

RELATED OCCUPATIONS:

Proof Pressman
Offset Pressman
Photoengraver

JOB RELATED HIGH SCHOOL SUBJECTS:

Graphic Arts
Art
Composition, Make-up/Layout
Letter Press
Offset Press
Lithography

ADDITIONAL INFORMATION:

High school graduation is usually required of Job Printers. Training may be acquired by a formal or informal apprenticeship, normally lasting 2 to 6 years. Course work and related specific skill preparation can also be obtained from community colleges or regional occupational center programs. Job Printers usually work in small owner-operated print shops. Opportunities for employment vary and are greatest in urban areas. Salaries also vary according to shop and location but beginning workers can expect $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LINOTYPE OPERATOR

JOB BRIEF

D.O.T. No: 650.582

D.O.T. Ref: Volume II, Page 274

Revision date: October 1973

THE JOB:

LINOTYPE OPERATOR: Linotype Operators are skilled workers who put newspaper copy written by reporters into metal type. They may also set copy for advertisements, books, brochures and other publications.

RELATED OCCUPATIONS:

Tape Perforator
Compositor
Lithographer
Phototypesetting Machine Operator
Proofreader

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Graphic Arts
Typing
Metal Shop
Industrial Arts

ADDITIONAL INFORMATION:

A high school education is the minimum preferred by most employers. A formal apprenticeship program is sponsored by the Typographic Union. The program lasts 4 to 5 years. An applicant must be 18 years of age and pass an aptitude test. Some employers require a physical examination and intelligence test. Some physically handicapped workers, such as deaf persons and leg amputees, are working successfully as Linotype Operators. Linotype operation is an occupation that is decreasing in opportunities because increasingly their functions are being performed by tape perforators. Salaries for journeymen range from $200 and $230 per week. Apprentices start at $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LITHOGRAPHER

JOB BRIEF

D.O.T. No: 971.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

LITHOGRAPHER: Lithographers are skilled craftsmen who sketch designs and numbers on metal, stone, or glass with or without specifications, and engrave plates for printing using chemicals, dyes, and special tools.

RELATED OCCUPATIONS:

Plate Maker
Photoengraver
Engraver

Compositor
Lithographic Cameraman
Lithographic (Offset) Pressman

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Chemistry
Industrial Arts

Graphics
Shop Mathematics
Mechanical Drawing

ADDITIONAL INFORMATION:

A high school diploma or equivalent is required to become a Lithographer. Union membership is usually required. This is not an entry level position. Entry is usually made as a bindery worker or pressman. Some community colleges offer classes in printing which involve the operation of presses. Opportunities for employment are limited but moderate increases are expected because of the continued growth of offset printing. Weekly salaries vary greatly from area to area and may range from $130 to $300.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

LITHOGRAPHIC CAMERAMAN

D.O.T. No: 972.382

D.O.T. Ref: Volume II, Page 514

Revision date: October 1973

THE JOB:

LITHOGRAPHIC CAMERAMAN: Lithographic Cameramen are skilled workers who photograph artwork and prepare it for use in the lithographic reproduction process.

RELATED OCCUPATIONS:

Lithographic Pressman
Bindery Worker
Offset-Duplicating Machine Operator
Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

Algebra
Chemistry
Photography
Industrial Arts
Art
Drafting

ADDITIONAL INFORMATION:

One must have a high school diploma or equivalent to become an apprentice. 18 years of age is the minimum age for an apprentice. These cameramen must have artistic abilities. For a person with formal training, it takes about 4 years of apprenticeship to work up to journeyman. Printer programs, and graphic art courses are offered by many community colleges. Salaries range from about $200 to $210 weekly for a journeyman. An apprentice usually starts between $150 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LITHOGRAPHIC (OFFSET) PRESSMAN

JOB BRIEF

D.O.T. No: 651.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

LITHOGRAPHIC (OFFSET) PRESSMAN: Lithographic (Offset) Pressmen are skilled craftsmen who set up and operate an offset printing press to reproduce copy from lithographic plates.

RELATED OCCUPATIONS:

Lithographic Cameraman
Bindery Worker
Typesetter
Plate Maker
Proofer

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Industrial Arts
English
Graphics
Mechanical Drawing
Shop Mathematics

ADDITIONAL INFORMATION:

Lithographic Pressmen must pass an aptitude test given by state departments of employment or the local union. These Pressmen enter a shop as general helpers and work up to Pressman. The outlook for qualified Pressmen is good throughout urban areas. Salaries start from $100 to $120 per week for apprentices; journeymen pressmen make up to $220 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

MULTILITH OPERATOR

JOB BRIEF

D.O.T. No: 651.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

MULTILITH OPERATOR: Multilith Operators run small offset printing presses which range from simple duplicating to detailed multi-color printing presses.

RELATED OCCUPATIONS:

Offset-Duplicating Machine Operator
Engraving-Press Operator
Printing Pressman
Varitype Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Business Machines
Typing

Printing
Photography
Machine Shop

ADDITIONAL INFORMATION:

There is no formal educational requirement, but most employers require a high school diploma or equivalent. Community colleges offer courses in printing that are helpful. There are employment opportunities for experienced operators. Finger dexterity, good vision, and a mechanical aptitude are job requirements. Salary ranges vary depending on the type of work but average between $110 to $130 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PHOTOENGRAVER

JOB BRIEF

D.O.T. No: 971.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

PHOTOENGRAVER: Photoengravers make metal printing plates of illustrations and other copy that can not be set up in type. They do this by photographing the copy, developing the negatives, and preparing photosensitized metal plates, such as copper, zinc, aluminum and magnesium. The printing surfaces on these plates stand out in relief above the nonprinting spaces as do the accompanying type.

RELATED OCCUPATIONS:

Lithographer
Stripper
Proof Pressman

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Graphic Arts
Photography
Photoengraving

ADDITIONAL INFORMATION:

The most common way to become a Photoengraver is through apprenticeship training usually lasting 5 years, including many hours of related classroom instruction. Besides the care and use of tools, the apprentice is taught to cut and square negatives, make combination plates, inspect negatives for defects, mix chemicals, sensitize metal and operate machines used in the photoengraving process. Apprenticeship applicants must be 18 years of age and must have a high school diploma or its equivalent. Training may also be obtained from regional occupational centers and community colleges. Opportunities for employment are expected to slowly decrease despite the growing use of photographs and color illustrations because of the increasing use of offset printing. Salaries range from $150 to $260 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PHOTOGRAPHER, TRAINEE

JOB BRIEF

D.O.T. No: 143.062

D.O.T. Ref: Volume II, Page 230

Revision date: October 1973

THE JOB:

PHOTOGRAPHER: Photographers take and develop pictures of people, places and objects. They do work in many fields including art, commercial, news, scientific, and industrial.

RELATED OCCUPATIONS:

Darkroom Technician
Cameraman
Artist
Commercial Artist
Illustrator
Designer

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Chemistry
Physics
Photography
Journalism

ADDITIONAL INFORMATION:

Photography is a creative form of art, so it is important for the Photographer to be imaginative. Photographers in the news media must be able to report and interpret news. They must have the ability to work with people and exert diplomacy. High school graduates without formal training will have a very difficult time finding work as a Photographer, but for those with formal training and a creative mind the opportunities are very good. Opportunities for the industrial Photographer are excellent in many metropolitan areas. Starting salaries range from $130 to $150 per week. Depending upon the type of photography and previous experience, Photographers can earn up to $270 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PRINTING PRESSMAN

JOB BRIEF

D.O.T. No: 651.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

PRINTING PRESSMAN: Printing Pressmen are employed by commercial printing plants, newspapers, and manufacturing firms to operate printing presses at maximum speed while producing a high quality product. They may operate any of the three types of printing presses, such as letterpress, gravure (photographic), or offset.

RELATED OCCUPATIONS:

Cloth Printer
Offset-Duplicating Machine Operator
Engraving-Press Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Printing
Machine Shop
Graphics
Industrial Arts

ADDITIONAL INFORMATION:

Graduation from high school or vocational trade school is usually required for employment in this occupation. A 4 to 6-year apprenticeship is necessary for employment as a Printing Pressman. Membership in a union is often required. Working conditions may be hot, noisy, and dirty and require physical strength and stamina. Employment opportunities are expected to increase moderately during the '70s but are limited. Salaries range from $190 per week for post-apprenticeship assistants to $220 per week for journeymen. Starting apprenticeship salaries average $100 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PROCESS ARTIST, TRAINEE
(Printing and Publishing)

JOB BRIEF

D.O.T. No: 972.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

PROCESS ARTIST, TRAINEE (Printing and Publishing): Process Artist Trainees aid Process Artists in their work while gaining skills and experience in the field. Process Artists correct details of illustration copy which is to be printed by lithographic process. They compare printed copy with original copy to determine color correction, silhouetting, or opaquing requirements. They prepare the dye or other chemicals and correct unsatisfactory tone values in film or glass. Process Artists also blank out or add color and detail to the plates as necessary, using crayons or pen and ink.

RELATED OCCUPATIONS:

Lithographic Cameraman
Photographer
Illustrator
Stripper

JOB RELATED HIGH SCHOOL SUBJECTS:

Photography
Graphic Communications
Art

ADDITIONAL INFORMATION:

High school graduation is required for this apprenticeable occupation. Training may be obtained from technical schools and some community colleges. Apprenticeships usually are from 4 to 5 years. Opportunities for employment are expected to increase moderately during the '70s. Salaries for Process Artists vary widely according to geographical location, but usually range from $150 to $285 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PROOF PRESSMAN

JOB BRIEF

D.O.T. No: 651.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

PROOF PRESSMAN: Proof Pressmen are members of a group of skilled workers, often called photoengravers, who make metal printing plates of illustrations and other copy. In making a photoengraving plate for the letterpress process, the entire job may be done by one person or by a number of skilled workers. The Proof Pressman is one of these specialized workers. Often called proofers, Proof Pressmen operate proof presses which print sample copies of print, usually for books or periodicals.

RELATED OCCUPATIONS:

Offset-Duplicating Machine Operator
Photoengraver

JOB RELATED HIGH SCHOOL SUBJECTS:

General Shop Practices/Safety
Graphic Arts

Offset Press
Letter Press

ADDITIONAL INFORMATION:

The most common way to become a Proof Pressman is through apprenticeship training. Apprenticeship programs last from 4 to 5 years and include classroom instruction. Apprenticeship applicants need to be high school graduates or equivalent and be 17 years of age. Appropriate graphic arts training may also be offered at technical schools and regional occupational centers. Opportunities for employment are expected to decline gradually during the '70s because of the application of advanced technology and the increasing use of offset printing. Salaries range from $160 to $220 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

SILK-SCREEN PRINTER

D.O.T. No: 979.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

SILK-SCREEN PRINTER: Silk-screen Printers print lettering and designs on objects, such as posters, targets, instrument dials, furniture and toys using a silk-screen printing machine. Electronic Silk-screen Printers print conductor components such as ceramic capacitors, film resistors and micro-electronic modules.

RELATED OCCUPATIONS:

Engraver
Textile Screen Printer

JOB RELATED HIGH SCHOOL SUBJECTS:

- Graphic Arts
- Art
- Silk-Screening
- General Industrial Arts

ADDITIONAL INFORMATION:

High school graduation is not required to be a Silk-screen Printer, but is recommended for advancement into other jobs. No previous training is required and entry workers generally receive only a short demonstration or explanation of the work requirements. Employment opportunities for Silk-screen Printers in the graphics arts field will not increase during the '70s; in the electronics field employment opportunities will increase rapidly during the '70s. Beginning salaries are approximately $100 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

STRIPPER, TRAINEE

JOB BRIEF

D.O.T. No: 971.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

STRIPPER: The Stripper, in the graphic arts field, is an offset printing occupation. Strippers make layouts on paper, glass, and film. They arrange artwork on the layout sheets called stripups, from which photographic impressions are made for the lithographic press plates. From these plates the final copies are printed.

RELATED OCCUPATIONS:

Photoengraver
Proof Pressman
Plate Maker
Makeup Man

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Graphic Arts
Photography
Mechanical Drawing
Composition, Makeup/Layout

ADDITIONAL INFORMATION:

High school graduation is usually required to be a Stripper. Training is usually acquired through an apprenticeship lasting from 2 to 6 years. Courses in graphic arts are ordinarily available at community colleges, technical schools, and regional occupational centers. Opportunities for employment during the '70s are expected to increase moderately. Salaries range from $150 to $300 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

TAPE PERFORATOR

JOB BRIEF

D.O.T. No: 208.588

D.O.T. Ref: Volume II, Page 287

Revision date: October 1973

THE JOB:

TAPE PERFORATOR: Tape Perforators are newspaper employees who transcribe typed newscopy onto perforated tapes which are then fed into machines which cast metal type for use in printing.

RELATED OCCUPATIONS:

Clerk Typist
Key Punch Operator
Linotype Operator
Newspaper Make-up Man
Compositor
Varitype Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Spelling
Printing

ADDITIONAL INFORMATION:

This is a 6-year apprenticeable occupation through the International Typographical Union's joint apprenticeship committee. This particular occupation has been opening up over the last 10 years and is making the traditional typesetter job obsolete. However, jobs are limited. Very few apprentices are taken into the program each year. Union membership is required in most areas. Salaries for the journeyman are approximately $200 to $220 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

TECHNICAL ILLUSTRATOR, TRAINEE
D.O.T. No: 017.281
D.O.T. Ref: Volume II, Page 377
Revision date: October 1973

THE JOB:

TECHNICAL ILLUSTRATOR, TRAINEE: Technical Illustrators make three-dimensional drawings of electrical, mechanical, and structural parts and assemblies. Occasionally they might be required to construct models or mock-ups of the object out of paper or a solid material.

RELATED OCCUPATIONS:

Commercial Artist
Draftsman
Engineering Designer
Photographer
Art Director

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Drafting
Photography
Printing
Science
Mathematics
Industrial Arts
Art

ADDITIONAL INFORMATION:

A Technical Illustrator must be able to understand engineering terminology. Most firms prefer community college or 4-year college training. Neatness and accuracy in work is very important. There are good opportunities for women in this occupation. Salaries range from $140 to $210 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

TYPESETTING MACHINE OPERATOR

JOB BRIEF

D.O.T. No: 650.582

D.O.T. Ref: Volume II, Page 274

Revision date: October 1973

THE JOB:

TYPESETTING MACHINE OPERATOR: Typesetting Machine Operators are skilled workers who operate semiautomatic machines that set metal type. They may be known as linotype, intertype, or teletypesetting operators.

RELATED OCCUPATIONS:

Compositor
Linotype Operator
Printing Pressman
Tape Perforator

JOB RELATED HIGH SCHOOL SUBJECTS:

Typing
Printing
Graphic Arts
Spelling
Metal Shop
Machine Shop

ADDITIONAL INFORMATION:

A high school education is required to qualify for the formal 4 to 6-year apprenticeship program sponsored by the Typographical Union. Most metropolitan areas are highly unionized so it will be necessary to join the union. Employment opportunities are limited and are declining as many printing firms are converting to automatically operated typesetting machines. Starting salary is $90 and ranges to $180 per week depending on experience.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

HEALTH/COSMETOLOGY

Page
ADMITTING CLERK (Hospital) 1
BARBER 2
BEAUTICIAN, see COSMETOLOGIST, TRAINEE . . . .
COSMETOLOGIST, TRAINEE 3
DEMONSTRATOR 4
DENTAL ASSISTANT 5
DENTAL HYGIENIST, TRAINEE 6
DENTAL LABORATORY TECHNICIAN, TRAINEE 7
DENTIST 8
DIETITIAN 9
DOCTOR, see PHYSICIAN . . . .
ELECTROCARDIOGRAPH (EKG) TECHNICIAN, TRAINEE 10
ELECTROENCEPHALOGRAPH (EEG) TECHNICIAN 11
HAIRDRESSER, see COSMETOLOGIST . . . .
HOME ATTENDANT 12
HOSPITAL MAID 13
HOSPITAL PORTER 14
INHALATION THERAPIST, TRAINEE 15
LICENSED VOCATIONAL NURSE 16
LVN, see LICENSED VOCATIONAL NURSE . . . .
MANICURIST, TRAINEE 17
MEDICAL ASSISTANT, TRAINEE 18
MEDICAL LABORATORY ASSISTANT, TRAINEE 19
MEDICAL-RECORD CLERK 20
MEDICAL RECORD LIBRARIAN 21
MEDICAL SECRETARY, see SECRETARY (General) BUSINESS/CLERICAL/SALES, page 43 . . . .
MEDICAL STENOGRAPHER, see STENOGRAPHER BUSINESS/CLERICAL/SALES, page 46 . . . .

INDEX

HEALTH/COSMETOLOGY

Page

MEDICAL TECHNOLOGIST 22
NURSE, see REGISTERED NURSE . . . .
NURSE'S AIDE 23
NUTRITIONIST, see DIETITIAN . . . .
ORDERLY (Hospital) 24
PHARMACY HELPER 25
PHYSICAL THERAPY ASSISTANT, TRAINEE 26
PHYSICAL THERAPIST 27
PHYSICIAN 28
PSYCHIATRIC TECHNICIAN 29
RECEPTIONIST, see BUSINESS/CLERICAL/SALES, page 40 . . . . .
RADIOLOGIC TECHNOLOGIST (X-ray Technician) 30
REGISTERED NURSE 31
SURGICAL TECHNICICIAN 32
WARD CLERK 33
WIG DRESSER 34
X-RAY TECHNICIAN, see RADIOLOGIC TECHNOLOGIST . . . .

ADMITTING CLERK (Hospital)

JOB BRIEF

D.O.T. No: 237.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

ADMITTING CLERK (Hospital): Admitting Clerks interview patients or relatives to obtain information required for hospital admissions. Clerks may also collect initial payments and refer the patient to the credit office. They provide a sympathetic, courteous service to assist patients in adjusting to the hospital or institution.

RELATED OCCUPATIONS:

Information Clerk
Registration Clerk
Receptionist
Office Clerk
Ward Clerk
Appointment Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Mathematics
Typing
Office Practice
Bookkeeping
Speech
Psychology

ADDITIONAL INFORMATION:

A pre-employment test is not usually given. This occupation is open to qualified and experienced high school graduates. Mature people are usually preferred although students are sometimes hired. Future employment prospects are good. An Admitting Clerk must be able to relate well with people and work well with patients, visitors, and relatives who may be under stress. Good grooming, appearance, and a pleasant telephone voice are essential. Admitting Clerks must be able to make decisions and be able to develop a good working medical-hospital vocabulary. Salaries range from $390 to $520 per month. Weekend and night shifts are usual.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

BARBER

D.O.T. No: 330.371

D.O.T. Ref: Volume II, Page 499

Revision date: October 1973

The Job:

BARBER: Barbers cut, trim, shampoo, color, bleach hair and may trim and shape beards and mustaches.

Related Occupations:

Cosmetologist
Make-up Man (Stage and Screen)

Job Related High School Subjects:

Business Mathematics
Health Sciences
Bookkeeping
First Aid

Additional Information:

There is an official apprenticeship program for this occupation that lasts about 18 months in many states. The completion of the 9th grade is usually all that is required of potential applicants. Many states require about 1,500 hours of instruction. Cost to the students is about $400 to $500 with $100 down, and this price usually includes the barbering tools. A union Barber is guaranteed about $100 per week or 75% of what he takes in during the week. Beginning Barbers often have a rough time getting started until they have become established in the community. Shop owners can expect to clear about $200 per week, depending upon the size of the shop and the volume of business. Salaries range from $100 to $250 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

COSMETOLOGIST, TRAINEE
D.O.T. No: 332.271
D.O.T. Ref: Volume II, Page 499
Revision date: October 1973

THE JOB:

COSMETOLOGIST (Beauty Operator, Hairdresser or Beautician): Cosmetologists shampoo, shape, set, permanent wave, and color hair according to the patrons' desires. They are beauty consultants, advising and creating personalized service for customers.

RELATED OCCUPATIONS:

- Barber
- Wig Demonstrator
- Make-up Technician
- Costume Designer
- Scalp Specialist
- Artist

JOB RELATED HIGH SCHOOL SUBJECTS:

- Health Sciences
- Hygiene
- Biology
- Physiology

ADDITIONAL INFORMATION:

Students in this field must have completed at least 2 years of high school before entering private training or be a high school graduate or the equivalent to enter community college training. They must complete 1600 hours of instruction in many states. A state license is necessary in order to be employed as a Cosmetologist. This occupation is growing in popularity among men. Educators in this field and successful shop owners stress that the job opportunities are good. The usual starting salary is $70 per week plus 60% commission.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

DEMONSTRATOR

JOB BRIEF

D.O.T. No: 297.458

D.O.T. Ref: Volume II, Page 489

Revision date: October 1973

THE JOB:

DEMONSTRATOR: Demonstrators explain, display, and demonstrate the qualities and function of merchandise. They may or may not be involved in making sales. Demonstrators are usually further identified by the merchandise they demonstrate; for example, Cosmetic Sales Demonstrator.

RELATED OCCUPATIONS:

Salesperson, General

JOB RELATED HIGH SCHOOL SUBJECTS:

Distributive Education Skills

ADDITIONAL INFORMATION:

High school graduation is usually the minimum educational requirement for Demonstrators although, depending on the product, college education may also be required. Persuasive selling techniques, diplomacy, and tact in dealing with people and the ability to become familiar with the object or services involved are characteristics employers look for in the prospective Demonstrator. Often companies have short training programs to teach the Demonstrator about their product. Salaries vary widely, depending on the product being demonstrated and geographical location, but would approximate $80 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

DENTAL ASSISTANT

JOB BRIEF

D.O.T. No: 079.378

D.O.T. Ref: Volume II, Page 477

Revision date: October 1973

THE JOB:

DENTAL ASSISTANT: Dental Assistants assist the dentist during examination and treatment of patients. They are responsible for sterilization of instruments and linens and relieve the dentist of routine duties.

RELATED OCCUPATIONS:

Dental Laboratory Technician
Nurse's Aide
Medical Technologist
Dental Hygienist
Radiologic Technologist
Physical Therapist
Medical Laboratory Assistant
Medical Receptionist

JOB RELATED HIGH SCHOOL SUBJECTS:

Life Sciences
Typing
Bookkeeping
Health Sciences

ADDITIONAL INFORMATION:

High school graduation is necessary and completion of an approved dental assistant's course would be very helpful for employment as a Dental Assistant. However, some dentists prefer to train their own assistants. This occupation is open to both men and women. There is a high turnover rate in this occupation but the supply of trained Dental Assistants is much greater than the number of job openings. Salaries range from $100 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

DENTAL HYGIENIST, TRAINEE
D.O.T. No: 078.368
D.O.T. Ref: Volume II, Page 477
Revision date: October 1973

THE JOB:

DENTAL HYGIENIST: Dental Hygienists are licensed to administer certain dental treatment such as cleaning, give instructions on teeth care, take X-rays, and assist the dentist in routine tasks.

RELATED OCCUPATIONS:

Dental Assistant
Dental Laboratory Technician
Electrocardiograph (EKG) Technician
Radiologic Technologist

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Health Sciences
Biology
Chemistry

ADDITIONAL INFORMATION:

High school graduation is the usual educational requirement for Dental Hygienists. The National Board of Dental Examiners and the State Board of Dental Examiners administer examinations which are required for registration and licensing. Future employment prospects are good, especially with the advent of dental care insurance. A neat appearance, good personal dental care, and a liking for people are essential characteristics for a Dental Hygienist. For enrollment in some community college programs one must score satisfactorily on the Dental Hygienist Aptitude test. Salaries range from $150 to $250 weekly, depending on the number of hours worked.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

DENTAL LABORATORY TECHNICIAN, TRAINE
D.O.T. No: 712.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

DENTAL LABORATORY TECHNICIAN: Dental Laboratory Technicians make dentures, crowns, bridges, and other dental work. These Technicians do not deal directly with patients but receive prescriptions from dentists and work in a laboratory.

RELATED OCCUPATIONS:

Dental Hygienist
Dental Assistant
Medical Laboratory Technician
Contour Wire Specialist

JOB RELATED HIGH SCHOOL SUBJECTS:

Algebra
Geometry
Biology
Chemistry
Physics
Art

ADDITIONAL INFORMATION:

Training for a Dental Laboratory Technician is offered at some community colleges and private schools. After two years of training and work experienc an AA Degree can be earned. After three years of on-the-job experience, one is eligible to take the examination given by the National Association of Certificated Dental Laboratories. Future job prospects are good. Qualifications for a Dental Laboratory Technician include good eye-hand coordination and manual dexterity. Starting salary is $100 a week. More experienced workers earn up to $180 weekly.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

DENTIST

JOB BRIEF

D.O.T. No: 072.108

D.O.T. Ref: Volume II, Page 473

Revision date: October 1973

THE JOB:

DENTIST: Dentists diagnose and treat diseases of the teeth and gums. They X-ray and clean teeth, fill cavities, and prepare special devices such as crowns. Some Dentists specialize in the areas of orthodontia and oral surgery.

RELATED OCCUPATIONS:

Physician
Dental Hygienist
Dental Laboratory Technician
Dental Assistant
Orthodontist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Science

ADDITIONAL INFORMATION:

In addition to 2 or 4 years of college, an additional 4 years of dental school and a state license are necessary to practice dentistry. Most Dentists are employed in private practice but some are employed by the government. Employment opportunities are expected to be good, particularly in growing suburban areas. The starting salary for Dentists is $780 per month but rises rapidly as their practice increases.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

DIETITIAN

J O B   B R I E F

D.O.T. No: 077.168
D.O.T. Ref: Volume II, Page 245
Revision date: October 1973

THE JOB:

DIETITIAN: Dietitians plan and direct food service programs in hospitals, schools, restaurants, and other institutions. They plan nutritional menus, supervise workers preparing food, order supplies and equipment, and inspect food preparation areas to maintain sanitary conditions. Dietitians may also teach nutrition and food preparation and may work with a doctor to develop special diets for patients.

RELATED OCCUPATIONS:

Home Economist
Dietetic Intern
Food Service Worker

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Home Economics
Health Sciences
Life Sciences
Social Studies
Chemistry
Food Service

ADDITIONAL INFORMATION:

The minimum educational degree for a Dietitian is a bachelor's degree in nutrition or institutional management. In addition, a 1-year internship in a clinic is necessary for many jobs and for professional recognition by the American Dietetic Association. Employment opportunities for full and part-time workers are expected to be very good during the '70s. Beginning salaries for Dietitians who have completed an internship average $800 per month and are slightly lower for those not completing the internshi

---

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

ELECTROCARDIOGRAPH (EKG) TECHNICIAN, TRAINEE

D.O.T. No: 078 368

D.O.T. Ref: Volume II, Page 477

Revision date: October 1973

THE JOB:

ELECTROCARDIOGRAPH (EKG) TECHNICIAN: Electrocardiograph (EKG) Technicians administer, under direction of professional medical personnel, an electrocardiograph test to record tracings of electrical impulses coming from the heart muscle.

RELATED OCCUPATIONS:

Orderly
Nurse's Aide
Surgical Technician
Electroencephalograph (EEG) Technician
Physical Therapist
Registered Nurse
Medical Laboratory Technician
Inhalation Therapist

JOB RELATED HIGH SCHOOL SUBJECTS:

Physical Sciences
Life Sciences
General Mathematics
Health Sciences

ADDITIONAL INFORMATION:

The minimum formal education requirement to become an Electrocardiograph (EKG) Technician is high school graduation. A few colleges and universities affiliated with hospitals offer EKG courses lasting a few months. On-the-job training, which is usually conducted by a senior EKG technician or cardiologist, is the principal method of obtaining the essential knowledge to become a successful technician. Manufacturers of electrocardiograph machines generally provide instructions in the operation of their equipment. The ability to follow detailed instructions and react quickly to orders, common sense, reliability, patience, and mechanical aptitude are among the desirable characteristics needed to become an EKG technician. The demand for Electrocardiograph (EKG) Technicians is not great because of very low turnover. There is no formal line of promotion. Advancement nearly always requires additional training. Salaries range from $120 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

ELECTROENCEPHALOGRAPH (EEG) TECHNICIAN

JOB BRIEF

D.O.T. No: 078.368
D.O.T. Ref: Volume II, Page 477
Revision date: October 1973

THE JOB:

ELECTROENCEPHALOGRAPH (EEG) TECHNICIAN: Electroencephalograph (EEG) Technicians administer, under direction of professional medical personnel, an electroencephalograph test to record electrical impulses from the brain. Most EEG Technicians are employed in the neurology departments of hospitals; however, some are employed in the neurologist's office.

RELATED OCCUPATIONS:

Electrocardiograph (EKG) Technician
Medical Assistant
Nurse
X-ray Technician
Inhalation Therapist

JOB RELATED HIGH SCHOOL SUBJECTS:

Physical Sciences
Health Sciences
Life Sciences
General Mathematics

ADDITIONAL INFORMATION:

A high school diploma is required for entry into this occupation. Entry into this occupation usually requires 3 to 6 months on-the-job training conducted by a neurologist, senior technician or an electroencephalographer. Limited community college or hospital training programs do exist and generally last 3 months to 1 year. Registration in a professional association, the American Board of Registration of Electroencephalograph Technicians, is not mandatory but is highly desirable for well-paying positions. Personal characteristics for this occupation include manual dexterity, good vision, electronic aptitude, and ability to work with patients and hospital staff. Employment opportunities are expected to be excellent through the '70s. Salaries range from $120 to $200 per week depending on experience.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

HOME ATTENDANT

JOB BRIEF

D.O.T. No: 354.878

D.O.T. Ref: Volume II, Page 479

Revision date: October 1973

THE JOB:

HOME ATTENDANT: Home Attendants, also known as home health aides, provide care for elderly or home-bound patients. Usual duties include personal services for the patient, such as bathing, grooming, some housework, food purchasing, and meal preparation.

RELATED OCCUPATIONS:

Nurse's Aide
Orderly
Practical Nurse
Child Care Worker

JOB RELATED HIGH SCHOOL SUBJECTS:

Health
First Aid
Homemaking

ADDITIONAL INFORMATION:

Persons interested in this position should possess knowledge of the basic techniques of patient care. There are no educational requirements necessary for entry into this field, but on-the-job training and instruction is usually provided. Home Attendants should have patience and sympathy for the problems of others, should be clean in appearance, and should be free of any communicable disease. Opportunities vary according to federal funding for medical programs and ability of the patients to purchase these services. Average salary is $70 per week and may vary between public and private agencies.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

HOSPITAL MAID

JOB BRIEF

D.O.T. No: 323.887

D.O.T. Ref: Volume II, Page 360

Revision date: October 1973

THE JOB:

HOSPITAL MAID: Hospital Maids are responsible for the cleaning and servicing of assigned areas such as wards, offices or surgery. As part of the housekeeping staff, they are usually supervised by the executive housekeeper.

RELATED OCCUPATIONS:

Nurses's Aide
Hospital Orderly
Surgical Orderly
Janitor
Housekeeper
Hospital Porter
Custodian

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

The job of Hospital Maid is an entry job and has no formal educational requirements. No test is given except for a few Civil Service positions. The work is somewhat routine. Training is available on the job. A clean, neat appearance and an agreeable manner are prime qualifications for all hospital work. Future prospects for the job appear good. Starting salary is around $90 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

HOSPITAL PORTER

JOB BRIEF

D.O.T. No: 381.887

D.O.T. Ref: Volume II, Page 360

Revision date: October 1973

THE JOB:

HOSPITAL PORTER: Hospital Porters clean and service hospital buildings, sweep and mop rooms, halls, laboratories, and stairways. They gather and dispose of refuse, wash walls and windows, assist in moving freight, and may make minor repairs to equipment.

RELATED OCCUPATIONS:

Groundsman	Maid
Hospital Maid	Hospital Orderly

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

No formal education is required, but high school is greatly desired. Porters should be dependable and in good health. Job opportunities are fair in most areas even though most are part-time positions and there may be an excess number of applicants. Weekly wages range from $120 to $130.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INHALATION THERAPIST, TRAINEE

JOB BRIEF

D.O.T. No: 079.368

D.O.T. Ref: Volume II, Page 477

Revision date: October 1973

THE JOB:

INHALATION THERAPIST: Inhalation Therapists treat patients with respiratory problems using oxygen equipment, such as oxygen tents and iron lungs. Frequently Inhalation Therapists are required to administer emergency treatment to patients suffering from heart failure, shock, drowning, etc.

RELATED OCCUPATIONS:

Dental Hygienist
Medical Assistant
Nurse

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
General Mathematics
Biology
Chemistry
Physics
First Aid

ADDITIONAL INFORMATION:

Although it has been possible to receive on-the-job training in inhalation therapy, there is now a definite trend toward requiring a formal training program offered in 4-year and community colleges. Upon the completion of formal training and 1 year's experience, it is possible to take the examination to become a registered Inhalation Therapist. Most Inhalation Therapists are employed in hospitals. Employment opportunities are expected to be excellent in the '70s with a great need for qualified therapists to serve in a supervisory capacity. The average starting salary for Inhalation Therapists is $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LICENSED VOCATIONAL NURSE

JOB BRIEF

D.O.T. No: 079.378
D.O.T. Ref: Volume II, Page 477
Revision date: October 1973

THE JOB:

LICENSED VOCATIONAL NURSE: Licensed Vocational Nurses perform nearly all bedside tasks in caring for patients. They also assist in examining patients, give medication as directed, perform some laboratory tests and do some clerical tasks.

RELATED OCCUPATIONS:

Nurse's Aide
Registered Nurse
Dental Assistant
Inhalation Therapist
Obstetric Technician
Medical Technologist
Psychiatric Technician
Surgical Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Hygiene
Biology
Health Education
General Mathematics
Home Economics
General Science

ADDITIONAL INFORMATION:

Licensed Vocational Nurses must be high school graduates or the equivalent and complete a 12-month Licensed Vocational Nurse course in an accredited school or have an equivalent education obtained in the military service. This occupation is open to both men and women. Training is available at private nursing schools, some community colleges, and in some adult school programs. A state examination and a health examination must be passed in order to receive a license. Starting salary for the Licensed Vocational Nurse is about $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

MANICURIST, TRAINEE

D.O.T. No: 331.878

D.O.T. Ref: Volume II, Page 507

Revision date: October 1973

THE JOB:

MANICURIST: Manicurists clean, shape, and color fingernails (and sometimes toenails) according to customer desires.

RELATED OCCUPATIONS:

Cosmetologist/Beautician
Reducing Salon Attendant
Pedicurist

JOB RELATED HIGH SCHOOL SUBJECTS:

Health Sciences
Introduction to Cosmetology

ADDITIONAL INFORMATION:

Manicurists are required to be 16 years of age and have a state license. Training for a state license is offered by accredited cosmetology schools and generally requires 350 hours of training. Manicurists may be employed in beauty salons or in barber shops. Good grooming and courteous manners toward the public are generally important. Often Manicurists advance to become Wig Dressers or Cosmetologists. Opportunities for Manicurists are good, but vary according to location. Salaries also vary but usually consist of a base salary of about $70 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

MEDICAL ASSISTANT, TRAINEE

JOB BRIEF

D.O.T. No: 079.368

D.O.T. Ref: Volume II, Page 477

Revision date: October 1974

THE JOB:

MEDICAL ASSISTANT, TRAINEE: Medical Assistants, under the direction of a physician, assist in the examination and treatment of patients by preparing treatment rooms and patients and arranging instruments and equipment for the physician's use. Medical Assistants may assist in the examination of patients by initiating their medical record, checking pulses, temperatures, blood pressures, and heights and weights. They may assist in the laboratory and perform clerical functions such as scheduling appointments and maintaining medical records.

RELATED OCCUPATIONS:

X-ray Clerk
Inhalation Therapist
Licensed Vocational Nurse
Dental Assistant

JOB RELATED HIGH SCHOOL SUBJECTS:

Health Sciences
Office Procedures
Chemistry
Typing
Biology
Psychology

ADDITIONAL INFORMATION:

The majority of Medical Assistants are employed in physicians' offices where they receive on-the-job training. Some training for this position is available in federal programs, high schools, and community colleges. Opportunities in this field are expected to be excellent throughout the '70s. Salaries range from $100 to $140 per week for beginning Medical Assistants and from $140 to $170 per week for experienced Medical Assistants.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 078.381

D.O.T. Ref: Volume II, Page 418

Revision date: October 1973

THE JOB:

MEDICAL LABORATORY ASSISTANT: Medical Laboratory Assistants perform routine laboratory tests for the diagnosis and treatment of illness. They are under the supervision of a licensed medical technologist, pathologist, or qualified physician. They perform such tests as urinalyses, blood cell counts, blood types, and generally maintain the laboratory.

RELATED OCCUPATIONS:

Laboratory Technologist
Medical Technologist

JOB RELATED HIGH SCHOOL SUBJECTS:

Chemistry
Biology
Mathematics

ADDITIONAL INFORMATION:

An individual interested in becoming a Medical Laboratory Assistant may be able to enter the field as a trainee with a high school diploma and good experiences in high school laboratory courses. Usually additional training is required; for example, for a Civil Service position, an A.A. degree is the minimal education required. Courses in bacteriology and microbiology are helpful. Most Medical Laboratory Assistants are employed in hospitals, clinics, and private laboratories. The outlook for employment is favorable in urban areas. Starting salaries range from $80 to $105 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

MEDICAL-RECORD CLERK

JOB BRIEF

D.O.T. No: 249.388

D.O.T. Ref: Volume II, Page 280

Revision date: October 1973

THE JOB:

MEDICAL-RECORD CLERK: Medical-Record Clerks compile and maintain the medical records of hospital and clinical patients and compile statistics for use in reports and surveys. They keep a daily statistical record of patient information such as admissions, discharges, deaths, births, and types of treatment rendered.

RELATED OCCUPATIONS:

Medical-Record Librarian
Accounting Clerk
Insurance Clerk
Clerk Typist

JOB RELATED HIGH SCHOOL SUBJECTS:

Arithmetic
Typing
General Office Procedures

ADDITIONAL INFORMATION:

Graduation from high school or business school with average or above average grades, in arithmetic is frequently the minimum requirement for entry in this type of work. Also a general knowledge of business machines and office procedures is required for employment. Opportunities for Medical-Record Clerks are good for the '70s; most clerks are employed by hospitals, clinics, medical research centers, and medical departments of insurance companies. Salaries range from $120 to $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MEDICAL RECORD LIBRARIAN

JOB BRIEF

D.O.T. No: 100.388

D.O.T. Ref: Volume II, Page 276

Revision date: October 1973

THE JOB:

MEDICAL RECORD LIBRARIAN: Medical Record Librarians are key members of the modern medical team. They are trained to assemble and analyze the component parts of the medical record; to keep the record readily available for use in future treatment of the patient, or for research and study, and to develop the medical statistics needed by the hospital.

RELATED OCCUPATIONS:

Cataloger
Medical Secretary

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
English
Biology
General Mathematics
Health Sciences
Library Practice

ADDITIONAL INFORMATION:

There is no entry to this occupation from high school. Requirements for becoming a Registered Medical Record Librarian are 4 years of college training, plus passage of the registration examination. It is possible to enter the field as a medical record technician through 2 years of post-high school training given in designated community colleges, adult schools, or approved schools for medical record technicians. The opportunities in this field are excellent now and are expected to grow in the future because of expanding employment in medical departments of industrial organizations, commercial insurance companies, medical research centers, and governmental institutions. Salaries range from $170 to $320 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MEDICAL TECHNOLOGIST

JOB BRIEF

D.O.T. No: 078.381
D.O.T. Ref: Volume II, Page 418
Revision date: October 1973

THE JOB:

MEDICAL TECHNOLOGIST: Medical Technologists are licensed to perform chemical, microscopic and bacteriological tests for use in diagnosis and treatment of disease under general direction of a clinical pathologist, licensed bioanalyst, or physician.

RELATED OCCUPATIONS:

Medical Laboratory Assistant
Dental Laboratory Technician
X-ray Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)

Algebra I and II	Chemistry
Biology	Physics

ADDITIONAL INFORMATION:

Some states still accept 2 years of training at an approved college and 3 years of clinical laboratory work, plus passing a state examination in preparation for a Medical Technologist license. Minimum educational requirement in many states is an AB or BS degree in Medical Technology plus 1 year of training in an approved laboratory for admission to licensing examination. The number of qualified Medical Technologists is limited; thus qualified persons have a variety of employment opportunities. Openings are expected to increase as increased medical care is made available to an increasing population and as medical diagnosis utilizes new scientific technology. Salaries range from $160 to $250 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

NURSE'S AIDE

JOB BRIEF

D.O.T. No: 355.878
D.O.T. Ref: Volume II, Page 479
Revision date: October 1973

THE JOB:

NURSE'S AIDE: Nurse's Aides perform certain duties not requiring professional training in caring for the hospitalized patient. Some of their duties may include bathing patients, observing and recording the patient's condition, running errands, delivering messages, and assisting with sanitation needs.

RELATED OCCUPATIONS:

Ambulance Driver
Dental Assistant
Hospital Orderly
Medical Assistant
Licensed Vocational Nurse
Psychiatric Technician
Radiologic Technologist
Registered Nurse

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

To qualify for a job as a Nurse's Aide, one should have completed high school and be at least 18 years of age. Completion of 10th grade is acceptable for some jobs. Most Nurse's Aides receive 6 to 12 months on-the-job training. There are no standard training requirements in many states. The federal government will train aides with no experience if they can pass the Federal Nursing Assistant test. The job outlook for Nurse's Aides is good. Salaries range from $110 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

ORDERLY, (Hospital)
D.O.T. No: 355.878
D.O.T. Ref: Volume II, Page 479
Revision date: October 1973

THE JOB:

ORDERLY, (Hospital): Hospital Orderlies perform numerous tasks in contributing to the comfort and welfare of patients. The help they provide enables nurses to devote more time to work that requires professional and technical training.

RELATED OCCUPATIONS:

Surgical Orderly
Nurse's Aide
Surgical Technician
X-ray Technician
Hospital Maid

JOB RELATED HIGH SCHOOL SUBJECTS:

Health Sciences

ADDITIONAL INFORMATION:

A test is usually not administered to applicants; however, 1 year of prior hospital experience is frequently required. Experience can be obtained in a nursing home or in military service as a medical corpsman. Future employment prospects are fair. This position is usually for men; women are titled Nurse's Aides. Personal traits required are honesty, compassion, patience, tact, good grooming and good physical health. Veterans Administration Hospitals often provide on-the-job training for this position. Starting salary is $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PHARMACY HELPER

JOB BRIEF

D.O.T. No: 074.387
D.O.T. Ref: Volume II, Page 271
Revision date: October 1973

THE JOB:

PHARMACY HELPER: Pharmacy Helpers work under the supervision of a registered pharmacist and perform routine duties in the hospital, clinic, professional or community pharmacy.

RELATED OCCUPATIONS:

Packaging Worker
Stock Clerk
Store Keeper

JOB RELATED HIGH SCHOOL SUBJECTS:

General Science
Basic Mathematics
Chemistry
Typing

ADDITIONAL INFORMATION:

This job is open to high school graduates. Previous experiences as a stock clerk or some store keeping experience is desired. The job is open to men and women. Employers include pharmaceutical companies, drug stores, and hospitals. A general knowledge test is frequently given to applicants. There is no formal training program but Pharmacy Helpers usually receive brief on-the-job training. Employment opportunities are limited; this is not a demand or a career position. Salaries range from $1.75 to $3.25 per hour for a 15 to 30-hour week or $80 to $130 per week for full-time employment.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

PHYSICAL THERAPY ASSISTANT, TRAINEE

JOB BRIEF

D.O.T. No: 355.878
D.O.T. Ref: Volume II, Page 479
Revision date: October 1973

THE JOB:

PHYSICAL THERAPY ASSISTANT: Physical Therapy Assistants work under the supervision of professional Physical Therapists. They assist the patient to dress and undress for treatment and may assist in removing and replacing such devices as splints, braces, and slings. Physical Therapy Assistants may also work with patients in the fitting of artificial limbs, braces, and splints and instruct them in the use of these prosthetic devices. Assistants are responsible for the care of therapy equipment. They also do clerical work such as keeping patients' records and making appointments.

RELATED OCCUPATIONS:

Physical Therapist
Nurse's Aide
Orderly

JOB RELATED HIGH SCHOOL SUBJECTS:

First Aid
Body Mechanics

ADDITIONAL INFORMATION:

High school graduation is the minimum requirement for those interested in this work. Training for this field can be acquired through a two-year college program for Physical Therapy Assistants or through on-the-job training in hospitals or other health care facilities. Community college programs are recommended by the American Physical Therapy Association. Individuals interested in the field should have good physical and mental health, manual dexterity, and a sincere interest in aiding the physically handicapped. Job opportunities are expected to be excellent through the '70s. Beginning salaries range from $90 to $120 per week for the inexperienced.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

PHYSICAL THERAPIST
D.O.T. No: 079.378
D.O.T. Ref: Volume II, Page 477
Revision date: October 1973

THE JOB:

PHYSICAL THERAPIST: Physical Therapists assist, under the supervision of a physician, injured or handicapped patients to rehabilitate arms, legs and other parts of the body using physical exercise, massage, and medical devices. Physical Therapists usually work in hospitals and clinics but also may work in schools or institutions caring for the handicapped.

RELATED OCCUPATIONS:

Nurse
Medical Assistant
X-ray Technician
Occupational Therapist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Biology
Chemistry

ADDITIONAL INFORMATION:

A bachelor's degree in physical therapy or a closely related program is necessary for employment in addition to the successful passing of a state license examination. Employment opportunities are expected to be very good during the '70s as there is a shortage of trained Physical Therapists. Salaries for Physical Therapists range from $170 per week for beginning to $280 per week for more experienced Physical Therapists.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

PHYSICIAN

D.O.T. No: 070.108

D.O.T. Ref: Volume II, Page 473

Revision date: October 1973

THE JOB:

PHYSICIAN: Physicians, also called medical doctors, diagnose and treat ill or injured patients. They examine patients, administer drugs and medicines, and encourage patients to develop preventive medical habits. Physicians often specialize in an area of medicine, such as pediatrics, surgery, psychiatry, and so on. Some Physicians teach in medical schools or are engaged in research for universities, foundations, and industry.

RELATED OCCUPATIONS:

Dentist
Veterinarian
Laboratory Technician
Medical Assistant
Nurse
Pediatrician
Radiologist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Science

ADDITIONAL INFORMATION:

In addition to a 3 or 4-year college program, Physicians must attend 4 years of medical school. An additional year of internship is also required before Physicians can practice medicine. If they wish to specialize, then additional training of at least 1 year is required. High school grades must be very good for acceptance in a medical school. While interning, Physicians earn about $500 per month but once they enter practice, their salary increases rapidly. Physicians may work some irregular hours but usually have regularly scheduled office hours.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PSYCHIATRIC TECHNICIAN

JOB BRIEF

D.O.T. No: 355.878

D.O.T. Ref: Volume II, Page 479

Revision date: October 1973

THE JOB:

PSYCHIATRIC TECHNICIAN: Psychiatric Technicians provide basic and psychiatric nursing care and treatment of the mentally ill and mentally retarded. Through their attitude, knowledge, and performance they facilitate the rehabilitation of the patient.

RELATED OCCUPATIONS:

Nurse's Aide
Vocational Nurse
Hospital Orderly
Child Care Attendant
Medical Assistant

JOB RELATED HIGH SCHOOL SUBJECTS:

Biology
Social Studies

ADDITIONAL INFORMATION:

Psychiatric Technician is an occupation requiring intensive on-the-job training and is open to both men and women. For employment at state institutions, a Civil Service test is required. The personal interview is an important factor in obtaining a position. Civil Service positions usually require American citizenship; a high school diploma or equivalent; or 10th grade completion and 2 years acceptable medical or nursing experience. Opportunities for employment in state institutions are few due to budgetary cuts. Jobs will slowly increase in private hospitals, but competition for these jobs is very keen. Salaries range from $130 to $170 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

RADIOLOGIC TECHNOLOGIST
(X-ray Technician)
D.O.T. No: 078.368
D.O.T. Ref: Volume II, Page 477
Revision date: October 1973

THE JOB:

RADIOLOGIC TECHNOLOGIST (X-ray Technician): Radiologic Technologists assist physicians who specialize in the use of X-rays and other forms of radiation to diagnose and treat diseases and injuries.

RELATED OCCUPATIONS:

Dental Laboratory Technician
Dental Assistant
Medical Laboratory Assistant
Medical Technologist
Occupational Therapy Aide
Chiropractor's Assistant

JOB RELATED HIGH SCHOOL SUBJECTS:

Biology
Chemistry
Physics
Algebra
Geometry
Typing

ADDITIONAL INFORMATION:

A high school diploma usually is the minimum education required and the applicant must pass the American Registry of Radiologic Technologists examination. Two years of training and 6 months of internship are necessary before taking the exam. This field offers abundant opportunities. The ability to get along with others even in difficult circumstances is important. X-ray technicians must be able to take orders from a variety of persons and work with people who are ill or injured. Some of the equipment is quite heavy so strength is required. Postgraduate training is often offered through professional organizations. X-ray technicians cannot practice in an accredited hospital unless they are licensed by the American Registry of Radiologic Technologists. Salaries range from $160 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

REGISTERED NURSE

JOB BRIEF

D.O.T. No: 075.378
D.O.T. Ref: Volume II, Page 477
Revision date: October 1973

THE JOB:

REGISTERED NURSE: Registered Nurses or Professional Nurses administer treatment and medication as directed by a physician. Nurses also perform many other kinds of professional nursing services for patients. Registered nurses may specialize in certain areas of nursing, such as pediatrics, psychiatry, surgery, public health, etc.

RELATED OCCUPATIONS:

Licensed Vocational Nurse
Orderly
Surgical Technician
Psychiatric Nurse
Medical Assistant
Dental Assistant
Home Health Care Aide

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Chemistry
Biology

ADDITIONAL INFORMATION:

Nurse's training is available at community colleges, in nursing college-hospital programs, and at 4-year colleges or universities. Entrance to these many programs requires passing nursing aptitude and college entrance tests. Nurses must pass a state Board of Examiners test to become a Registered Nurse. This occupation is open to both men and women and offers excellent employment prospects. A nurse should have empathy, compassion, and understanding. Top level nursing jobs usually require a BA degree, and many positions even require an MA degree. Starting salary is approximately $150 per week for an RN with an AA degree, and $170 per week with a BA.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

SURGICAL TECHNICIAN

D.O.T. No: 079.378

D.O.T. Ref: Volume II, Page 477

Revision date: October 1973

THE JOB:

SURGICAL TECHNICIAN: Surgical Technicians are skilled hospital employees who assist surgeons and surgical nurses during operations and post-operative treatment of patients.

RELATED OCCUPATIONS:

Licensed Vocational Nurse
Surgical Orderly
Hospital Orderly
Registered Nurse

JOB RELATED HIGH SCHOOL SUBJECTS:

Biology
Chemistry

ADDITIONAL INFORMATION:

The Surgical Technician is part of the surgical team. To be a Surgical Technician, one should have 1 year of experience as a hospital orderly and 6 months or more experience in surgery. Experience and training can be obtained in the armed services. Much of the training for Surgical Technicians is obtained on the job. This training may take 6 months or more, depending on how fast one learns. This position is open to both men and women, and future employment prospects are very good. To work in surgery one must become accustomed to the sight of blood and be able to work swiftly and accurately under the direct orders of a physician or professional nurse. Starting salary is $100 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

201

WARD CLERK

JOB BRIEF

D.O.T. No: 219.388
D.O.T. Ref: Volume II, Page 280
Revision date: October 1973

THE JOB:

WARD CLERK: Ward Clerks (Floor Clerks) in the ward or floor nursing unit of a hospital act as receptionists and do much of the paper work. Ward Clerks are responsible for the accuracy and updating of records, under the supervision of the registered nurse, and may also be expected to deliver messages.

RELATED OCCUPATIONS:

- Clerk-Typist
- Medical Records Librarian
- Medical Records Clerk
- Accounting Clerk
- Cashier
- Insurance Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

- Typing
- Business Mathematics
- Bookkeeping
- Office Practice

ADDITIONAL INFORMATION:

High school graduation is usually expected; however, prior experience in related work can compensate for less formal education. Though an employment test is not usually required, applicants will be screened in a personal interview. The prospective Ward Clerk must be able to command the respect of others, relay messages (written and oral) accurately, be well organized, flexible, and have a mature personality and neat appearance. Salaries range from $120 to $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

WIG DRESSER

D.O.T. No: 332.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

WIG DRESSER: Wig Dressers are often called wig stylists. They comb, set, cut, shape, color, condition, and fit wigs and hair pieces according to instruction.

RELATED OCCUPATIONS:

Cosmetologist/Beautician
Barber

JOB RELATED HIGH SCHOOL SUBJECTS:

Cosmetology

ADDITIONAL INFORMATION:

Wig Dressers usually work in beauty salons but may be employed by stores that sell wigs. Wig Dressers are required to be 16 years of age and do not have to have a license in many states. However, some technical instruction is usually necessary to learn the desired techniques. Opportunities for Wig Dressers are best in large stores in urban areas. Salaries vary greatly from shop to shop and are usually based on a minimum wage of about $60 per week plus commission on wig sales.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

INDEX

AGRICULTURE/CONSERVATION

Page

FARM HAND (General) 1

FORESTER 2

FORESTRY AIDE 3

GROUNDSMAN 4

FARM HAND (General)

JOB BRIEF

D.O.T. No: 421.883

D.O.T. Ref: Volume II, Page 444

Revision date: October 1973

THE JOB:

FARM HAND (General): Farm Hands are responsible for the care and feeding of livestock, for the planting and harvesting of crops, and for maintenance of farm machinery and equipment.

RELATED OCCUPATIONS:

Farmer
Farm Foreman

JOB RELATED HIGH SCHOOL SUBJECTS:

Auto Mechanics	Industrial Arts
Agriculture	Metals Shop

ADDITIONAL INFORMATION:

Job requirements for a Farm Hand are mainly interest and physical strength since on-the-job training is usually provided. Skills in repairing machinery and some carpentry and construction skills are desirable. Work is generally outdoors and is physically demanding. Opportunities are limited and seasonal. Salaries for Farm Hands are variable, but they range from $70 to $120 per week and may include housing.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

FORESTER

D.O.T. No: 040.081

D.O.T. Ref: Volume II, Page 466

Revision date: October 1973

THE JOB:

FORESTER: Foresters manage, develop and protect forest lands, ranges and their resources. They plan and direct projects to plant or replant forests, plan and direct firefighting programs, conduct educational programs about forest safety and conservation and perform research in areas of concern, such as flood control, forest diseases and soil erosion.

RELATED OCCUPATIONS:

Agronomist
Soil Conservationist
Wood Technologist
Park Ranger

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Science
Horticulture
English
Speech
Biology

ADDITIONAL INFORMATION:

A 4-year college degree in forestry or a related area is required to be a Forester. The majority of professional Foresters are employed in general forestry work, but many specialize in principal areas, such as wildlife management or range management. Opportunities for employment are limited and new forestry graduates will face competition for jobs. Beginning Foresters can earn $150 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

FORESTRY AIDE

JOB BRIEF

D.O.T. No: 441.384

D.O.T. Ref: Volume II, Page 413

Revision date: October 1973

THE JOB:

FORESTRY AIDE: Forestry Aides assist foresters in managing and caring for both public and private forest lands.

RELATED OCCUPATIONS:

Park Ranger
Fire Fighter
Forester
Wild Life Biologist
Range Conservationist

JOB RELATED HIGH SCHOOL SUBJECTS:

Horticulture
General Science
Biology
Mathematics
Industrial Arts
Drafting or Mechanical Drawing

ADDITIONAL INFORMATION:

Opportunities in this occupation are available with the U.S. Forest Service, state divisions of Forestry, and state divisions of Parks. Many jobs are available during the summer months for those young people wishing to obtain experience in forestry. During these summer months some 3,500 jobs become available; however, for each opening there are 5 to 10 applicants, and those from rural communities are selected first. For young persons desiring to make a career in forestry, the more education they possess, the higher up the ladder they can progress. Whether a community college graduate or a high school graduate, aides usually start in an entry level position. Starting salary is $150 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

GROUNDSMAN

D.O.T. No: 407.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

GROUNDSMAN: Groundsmen care for grounds, lawns, trees, shrubbery and gardens under the supervision of Senior Groundsmen or Gardeners.

RELATED OCCUPATIONS:

Park Ranger
Forestry Aide
Gardener

JOB RELATED HIGH SCHOOL SUBJECTS:

Horticulture
Industrial Arts
Landscaping

ADDITIONAL INFORMATION:

This is one of the few occupations where a high school diploma is not required. An eighth grade education is all that is needed in most cases. An interview is most often used to screen applicants; however, a written examination is sometimes used. The applicant should possess the ability to operate those power tools used in groundskeeping and should have a valid driver's license. Most cities do not list any age requirement other than being under 65 years of age. A recent trend indicates more and more young people are entering this occupation. The majority of jobs as Groundsmen are available with city park systems or with golf courses. The Groundsmen will start at about $150 per week and can go up to $210 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

ARTISTIC/LITERARY/MUSIC

Page

ARCHITECT 1

ARTIST, see COMMERCIAL ARTIST . . . .

BALLET DANCER, see DANCER . . . .

CAMERAMAN 2

CLOTHES DESIGNER, see FASHION DESIGNER . . . .

COMMERCIAL ARTIST 3

DANCER 4

DISC JOCKEY, see RADIO AND TELEVISION ANNOUNCER . . . . .

DISPLAYPERSON 5

FASHION DESIGNER 6

INTERIOR DESIGNER/DECORATOR 7

JEWELER 8

JOURNALIST, see REPORTER . . . .

LITERARY WRITER, see REPORTER . . . .

MODEL 9

MUSICIAN, INSTRUMENTAL 10

NEWSPAPER REPORTER, see REPORTER . . . .

PRODUCER-DIRECTOR (Radio and Television) 11

RADIO AND TELEVISION ANNOUNCER 12

REPORTER 13

SCRIPT WRITER (Continuity Writer) 14

SIGN PAINTER 15

SINGER 16

STATION PROGRAM DIRECTOR 17

JOB BRIEF

ARCHITECT

D.O.T. No: 001.081

D.O.T. Ref: Volume II, Page 371

Revision date: October 1973

THE JOB:

ARCHITECT: Architects plan and design buildings and other structures. Architects also work with other professionals, such as engineers, urban planners, and landscapers to design cities and towns and to plan and improve surrounding physical environments. Architects may specialize in particular areas such as landscape and planning.

RELATED OCCUPATIONS:

Draftsman
Urban Planner
Structural Engineer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Drafting
English
Industrial Arts
Mathematics
Mechanical Drawing
Social Studies
Blue Print Reading
Graphics

ADDITIONAL INFORMATION:

The usual method of becoming a licensed Architect is to complete a five-year college course, work for three years, then qualify by passing a state examination for licensing. General tasks of most Architects include planning the structure, making cost estimates, checking legal requirements, preparing drawings, specifications, and supervising actual construction. Architects must be able to work with people. Opportunities for Architects are limited and many young Architects work as draftsmen to stay in the field. Starting salaries for architectural school graduates are $650 to $870 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

CAMERAMAN

JOB BRIEF

D.O.T. No: 143.062

D.O.T. Ref: Volume II, Page 230

Revision date: October 1973

THE JOB:

CAMERAMAN: Broadcasting Cameramen operate television cameras to photograph scenes for broadcast. They observe scenes through camera monitors and adjust camera lenses to maintain the scenes in focus and to alter angles or distances of shots as directed.

RELATED OCCUPATIONS:

Audio-Visual Technician
Station Program Director
Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Audio-Visual Techniques
Journalism
Photography
Modern Media
Radio Electronics

ADDITIONAL INFORMATION:

Two-year training schools (community colleges and trade schools) are usually the minimum training requirements for the job of Cameraman. TV channels sometimes offer training programs. A broad education is recommended in college including English, government, history, electronics, and engineering. Some community colleges operate TV and radio stations. These provide excellent field experience. Cameramen must be able to work under the pressure of a rigid time schedule, lift up to 100 pounds, work on their feet for long periods of time, work well with others as a member of a team, and learn electronic technology. Because of the heavy lifting involved, cameramen are usually men. Major employers are broadcasting studios and companies dealing in industrial or commercial telecast. Salaries range from $100 to $180 for a 40 hour week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

COMMERCIAL ARTIST

JOB BRIEF

D.O.T. No: 141.081
D.O.T. Ref: Volume II, Page 232
Revision date: October 1973

THE JOB:

COMMERCIAL ARTIST: Commercial Artists create drawings and illustrations for reproduction in newspapers, magazines, package design or book illustrations. Planning advertising layouts, retouching photos, doing fashion drawings, cartoons, or painting signs are all part of the job of a Commercial Artist.

RELATED OCCUPATIONS:

- Sign Painter
- Illustrator
- Set Designer
- Fashion Designer
- Artist

JOB RELATED HIGH SCHOOL SUBJECTS:

- College Preparation Courses (recommended)
- Art
- English
- Yearbook, Magazine, or Newspaper
- Business Administration
- Photography

ADDITIONAL INFORMATION:

Most jobs for Commercial Artists are in metropolitan areas. Large numbers of Commercial Artists are employed by industry. Completion of community college is an absolute minimum for most commercial art jobs. Employers may give preference to 4-year college graduates or to those who have completed art institute training. Salaries range from about $500 per month for the person in mechanical production to $700 to $800 for design and layout work.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

DANCER

JOB BRIEF

D.O.T. No: 151.048
D.O.T. Ref: Volume II, Page 398
Revision date: October 1973

THE JOB:

DANCER: Dancers perform a variety of dance steps solo, with a partner, or with a group. Dancers may specialize in a certain type of dance such as ballet, acrobatic, modern, or jazz. They may work in television, films, night clubs, theaters, or for professional dance companies.

RELATED OCCUPATIONS:

Dance Instructor
Choreographer
Dance Studio Owner
Ballet Dancer

JOB RELATED HIGH SCHOOL SUBJECTS:

Physical Education
Modern Dance
Art
Design
Drama
Music
French
Clothing and Textiles

ADDITIONAL INFORMATION:

Although no special educational requirements are listed, special training in dance at private dance schools is recommended. Many colleges and universities offer majors in dance. Dancers must devote long hours to practice, training, and study. Patience, physical stamina, and self discipline are necessary personal characteristics. Opportunities are limited because there are few full-time jobs available and there is a relatively large supply of available Dancers. Male Dancers face less competition for employment than do female Dancers because fewer men than women seek dancing as a career. Salaries vary, but a full-time Dancer averages $170 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

DISPLAYPERSON

JOB BRIEF

D.O.T. No: 298.081

D.O.T. Ref: Volume II, Page 232

Revision date: October 1973

THE JOB:

DISPLAYPERSON: A Displayperson works in department and retail stores. He arranges merchandise and special displays to attract the prospective buyer.

RELATED OCCUPATIONS:

Interior Designer/Decorator
Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

Art	Industrial Arts
Design	Mechanical Drawing
Color Composition	Woodwork
	Interior Decorating

ADDITIONAL INFORMATION:

This is a highly competitive field where proven ability and innate talent count more than formal schooling. A high school diploma is usually the minimum educational requirement. Training is available in some of the community colleges. A flair for art and design is very important as are originality and adaptability. Most beginning Displaypersons transfer from sales or clerical departments of stores to work in display. Demand for this kind of talent is steady but small. Hours of work range from 40 to 50 hours per week, and salaries from $90 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

FASHION DESIGNER

JOB BRIEF

D.O.T. No: 142.081

D.O.T. Ref: Volume II, Page 232

Revision date: October 1973

THE JOB:

FASHION DESIGNER: Fashion Designers create, design, and prepare patterns for new types and styles of wearing apparel; write specifications for the construction, color and fabric of garments; and review new styles with the salesmen. Some Fashion Designers travel to garment centers and shows.

RELATED OCCUPATIONS:

Pattern Maker
Textile Designer
Florist
Display Artist

JOB RELATED HIGH SCHOOL SUBJECTS:

Salesmanship
Art
Design
Graphics
Clothing and Textiles
General Mathematics

ADDITIONAL INFORMATION:

2 to 3 years vocational, art or design school provide acceptable training for entry positions in fashion designing. Advancement to responsible positions depends largely upon artistic ability and technical skills gained through experience and on-the-job training. Many designers begin as pattern makers or with apprenticeships in fashion design. Fashion Designers should be creative, have a knowledge of fabrics and color, and be able to translate ideas into a finished garment. Employment opportunities will be good for Fashion Designers during the '70s due to the public's increased interest and ability to purchase clothing. Beginning salaries for an assistant designer are $90 to $115 per week with unlimited advancement for talented people.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INTERIOR DESIGNER/DECORATOR

JOB BRIEF

D.O.T. No: 142.051

D.O.T. Ref: Volume II, Page 228

Revision date: October 1973

THE JOB:

INTERIOR DESIGNER/DECORATOR: The creative work of Interior Designers/Decorators enhances the attractiveness of homes and other buildings. They plan the functional arrangement of interior space and coordinate the selection of furniture, draperies and other fabrics, floor coverings, and interior accessories.

RELATED OCCUPATIONS:

Commercial Artist
Display Manager
Architect

Art Director
Display Designer
Fashion Designer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Homemaking
Art
Drafting

Interior Decoration
Business Courses

ADDITIONAL INFORMATION:

This occupation has no entry directly from high school. A minimum of 2 years of college is expected and there is a growing number of 4-year college graduates entering the field. The field is becoming more and more sophisticated due to the standards set by the American Institute of Interior Designers. If a student has the flair and the talent, the opportunities are good. The field has great opportunities in furnishing new office buildings as well as other types of commercial ventures. However, opportunities are subject to change when economic conditions are poor. Salaries are $500 and up per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JEWELER

JOB BRIEF

D.O.T. No: 700.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

JEWELER: Jewelers are skilled craftsmen who make or repair rings, necklaces, and other jewelry; they create jewelry from metal such as gold, silver, and platinum; and set precious or semiprecious stones.

RELATED OCCUPATIONS:

Silversmith
Jeweler Apprentice
Engraver
Stone Setter
Watchmaker

JOB RELATED HIGH SCHOOL SUBJECTS:

Design
Photography
Art
Mechanical Drawing
Metal Shop
General Mathematics

ADDITIONAL INFORMATION:

Employers require a high school diploma for employment in this occupation. An individual must serve a formal 3 to 4-year apprenticeship. Employers supply on-the-job training under an experienced jeweler. Some community colleges and trade schools offer courses in jewelry repair, jewelry design, and engraving. Employment opportunities are limited. Beginning salaries are from $90 to $140 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MODEL

JOB BRIEF

D.O.T. No: 297.868

D.O.T. Ref: Volume II, Page 408

Revision date: October 1973

THE JOB:

MODEL: Models display wearing apparel for fashion designers, clothing manufacturers and retail stores, and they pose for artists and photographers. They also do hostessing, product demonstrating, and commentating.

RELATED OCCUPATIONS:

Dancing
Acting
Sales Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Speech
Drama
Business Courses
Modern Dance
Clothing

ADDITIONAL INFORMATION:

Additional training after high school is necessary to become a Model. Most agencies give a test to determine what the applicant knows about modeling. The cost for training is $240 to $300 for a 12-week modeling course. Modeling is not an easy job. It requires much self-sacrifice, self discipline, and creativity. Presently there are more modeling jobs than qualified workers to fill them; however, a few modeling agencies often control most of the jobs. The salary depends on the type of job and whether it is full or part time. Models who work a full 40-hour week may earn $400 or more per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

MUSICIAN, INSTRUMENTAL

JOB BRIEF

D.O.T. No: 152.048

D.O.T. Ref: Volume II, Page 394

Revision date: October 1973

THE JOB:

MUSICIAN, INSTRUMENTAL: Instrumental Musicians play an instrument or instruments according to the style and standards of the musical unit in which they are working. An instrumental Musician may also be a solo performer.

RELATED OCCUPATIONS:

Musician, Singer
Music Teacher

JOB RELATED HIGH SCHOOL SUBJECTS:

Glee Club
Band

ADDITIONAL INFORMATION:

Instrumental Musicians usually begin their training when very young and, after they graduate from high school, take further study at college or a music conservatory. This is a very competitive field and many opportunities are on a part-time basis only. Salaries range from $140 to $200 per week with the scale set by the locals of the American Federation of Musicians in most areas.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

PRODUCER-DIRECTOR
(Radio and Television)
D.O.T. No: 159.118
D.O.T. Ref: Volume II, Page 237
Revision date: October 1973

THE JOB:

PRODUCER-DIRECTOR (Radio and Television): Producer-Directors plan and supervise the production of a program or series of programs in TV and radio both in rehearsal and in on-the-air presentation.

RELATED OCCUPATIONS:

Station Program Director
Technical Director
Script Writer
Audio-Visual Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Speech
Journalism
Drama
Photography
Graphic Communications

ADDITIONAL INFORMATION:

Two years of community college or trade school is the minimum requirement for a Producer-Director; however, most production positions require at least a 4-year college education. Community colleges often offer a television studio and/or a radio studio under student direction. The Producer-Director is the focal point of the production effort and must be a supervisor, administrator, and a creative artist. He must be calm and able to work quickly and accurately on a tight time schedule. Employment opportunities are expected to grow at a moderate rate throughout the '70s. Additional opportunities arise with the increased use of cable TV and the increased number of educational broadcasting stations. Salaries for a 40 to 48-hour week range from $170 to $280.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

RADIO AND TELEVISION ANNOUNCER

D.O.T. No: 159.148

D.O.T. Ref: Volume II, Page 400

Revision date: October 1973

THE JOB:

RADIO AND TELEVISION ANNOUNCER: Radio and Television Announcers present news and live commercial messages, introduce programs, describe sporting events, act as masters of ceremonies, conduct interviews, and identify stations.

RELATED OCCUPATIONS:

Dramatist
Writer
Disc Jockey
Newscaster-Sportscaster

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Journalism
Music
Speech
Drama
Electronics

ADDITIONAL INFORMATION:

There are few openings for high school students because additional training and experience are needed. Several community colleges and private schools offer technical training. One might enter at a small-town station and progress to higher paying jobs at a metropolitan area station. Beginners must be able to handle the technical aspects of broadcasting. They must be able to work long hours and under pressure. Salaries vary greatly depending on talent, area of employment and position. Usually the salaries range from $90 to $250 per week but may be much higher depending on an individual's talent.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

REPORTER

JOB BRIEF

D.O.T. No: 132.268
D.O.T. Ref: Volume II, Page 526
Revision date: October 1973

THE JOB:

REPORTER: Reporters gather information about newsmaking events and write stories for publication in newspapers or for broadcasts over radio and television. They may be assigned to cover specific areas such as police news, local government, schools or politics.

RELATED OCCUPATIONS:

- Technical Writer
- Copy Writer
- Copy Editor
- Freelance Writer
- Public Relations Man
- Script Writer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)

- English
- Journalism
- Typing
- Speech
- Photography
- Economics
- Social Studies

ADDITIONAL INFORMATION:

Completion of 2 years of college is the minimum education for this occupation. Most newspapers prefer 4-year college graduates and large papers and TV stations are hiring persons with master's degrees. Students interested in reporting should take advantage of every opportunity to be active in school-related activities. A student should try to work in a local newspaper office during the summer to become acquainted with the many activities that occur on a newspaper. Editors look for the following personal traits in a potential Reporter: curiosity, liking for people, aggressiveness, adaptability, and versatility. Salaries start at $100 to $150 per week and depending upon experience, some Reporters earn up to $325 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

SCRIPT WRITER (Continuity Writer)

JOB BRIEF

D.O.T. No: 131.088

D.O.T. Ref: Volume II, Page 524

Revision date: October 1973

THE JOB:

SCRIPT WRITER (Continuity Writer): Script Writers write commercial announcements, public service and station promotional announcements, and are called upon to create program material.

RELATED OCCUPATIONS:

Producer-Director
Copywriter
Program Director
Reporter

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Journalism
Civics
Film Making
Speech
Drama

ADDITIONAL INFORMATION:

A high school diploma is required and an AA degree is usually the minimum educational requirement. Many jobs in program writing call for a 4-year college education. One must be able to develop material on demand for any particular audience and work quickly and accurately on a tight time schedule where rewriting is not always possible. Imagination, perseverance, and industry are very important traits. One should understand that good luck, proper timing, and knowing someone in the industry are often as important as experience in securing a job. Vacation relief jobs are the best means of entry into the industry. UHF and cable stations hire trainees with some writing experience, although competition is very keen in all areas. Salaries for a 40-hour week range from $130 to $260.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

SIGN PAINTER

D.O.T. No: 970.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

SIGN PAINTER: Sign Painters design, lay out, and paint letters and designs to make signs. Their work involves commercial signs, outdoor advertising, motion pictures, and television.

RELATED OCCUPATIONS:

Commercial Artist
Painter, Construction

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Graphic Art
Industrial Arts
Mechanical Drawing

ADDITIONAL INFORMATION:

Most employers set no educational specifications for the Sign Painter; however, formal training in art, particularly in lettering, is valuable. Employers may require samples of work and then hire on a trial basis to measure aptitude, productivity, and ability. Many college-trained artists apply for sign painting jobs while they continue their studies. Limited apprenticeships are available through large sign companies to people who demonstrate talent. The need for Sign Painters has not grown because of legislation regulating use and size of signs; furthermore, the industrialization of sign painting has adversely affected this occupation. An apprentice will start at $130 per week, and a journeyman can earn up to $260 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SINGER

JOB BRIEF

D.O.T. No: 152.048

D.O.T. Ref: Volume II, Page 396

Revision date: October 1973

THE JOB:

SINGER: Professional Singers use their voices to entertain people. They may use their voices in developed techniques which demonstrate a particular style or a broad knowledge of music. Concert Singers sing classical, opera, religious, and folk music in musical programs. Popular Singers sing songs in the popular idiom using any number of methods to achieve their individual styles of vocal delivery. They may be designated as Blues Singers, Rock Singers, Folk Singers, Gospel Singers, and so on.

RELATED OCCUPATIONS:

Music Teacher
Choral Director
Instrumental Musician

JOB RELATED HIGH SCHOOL SUBJECTS:

Chorus
Instrumental Music
Speech
Foreign Language
Vocal Music

ADDITIONAL INFORMATION:

Special training at a music conservatory, college, or private lessons is often required to enter this work. Many Concert Singers are soloists for religious ceremonies; some are members of local opera houses and musical choruses. Popular Singers perform in musical shows of all kinds, such as films, stage, radio, television, and night clubs. A few Singers make and sell recordings. Because most Singers have only part-time or irregular employment as Singers, they often have full-time jobs of other types and sing only in the evenings or weekends. Salaries vary for Singers according to talent, area, and popularity. Singers who perform professionally usually belong to a union.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

STATION PROGRAM DIRECTOR

JOB BRIEF

D.O.T. No: 184.168

D.O.T. Ref: Volume II, Page 245

Revision date: October 1973

THE JOB:

STATION PROGRAM DIRECTOR: It is the job of Station Program Directors to plan radio or television program schedules and integrate programs into a harmonious whole to give stations broad audience appeal. They determine and administer the station's programing policies and plan the most effective programing for the station.

RELATED OCCUPATIONS:

Producer-Director
Technical Director
Script Writer
Audio-Visual Technician

JOB RELATED HIGH SCHOOL SUBJECTS:

Film Making
Speech
Graphics Communication
Drama
Photography
Journalism

ADDITIONAL INFORMATION:

Most jobs in programing require a 4-year college education or at least a 2-year degree in telecommunications. Most Program Directors have worked their way up through the programing department and quite a few are former directors or announcers who have acquired experience and demonstrated ability for supervision and administration. An FCC license is required. Some community colleges offer closed circuit TV and radio in their teleproductions program. At present there are few women in this field. Employment opportunities are expected to increase at a moderate rate through the '70s. Additional opportunities will be available with the emergence of cable TV and the increasing number of educational broadcasting stations. Vacation relief jobs are the best means of entry into a studio. Salaries for a 40 to 48-hour week range from $240 to $300.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

MECHANICAL/TRANSPORTATION/CONSTRUCTION

Page

AIR TRAFFIC CONTROLLER 1

AIRPLANE MECHANIC 2

AUDIOVISUAL SPECIALIST (Education) 3

BUS DRIVER 4

BUTCHER, see MEAT CUTTER (Retail) . . . .

CARPENTER 5

CIVIL SERVICE APPRENTICE 6

COIN-VENDING MACHINE MECHANIC 7

CONTROL ROOM TECHNICIAN (Radio and Television) 8

ENGINEERING TECHNICIAN,
see MECHANICAL-ENGINEERING TECHNICIAN . . . .

FIREMAN 9

HOUSEPAINTER, see PAINTER (Construction and Maintenance) . .

IRONWORKER (Structural and Ornamental) 10

MACHINIST 11

MAINTENANCE MAN 12

MAINTENANCE MECHANIC (Industrial) 13

MEAT CUTTER (Retail) 14

MECHANICAL-ENGINEERING TECHNICIAN 15

OPERATING ENGINEER 16

PAINTER (Construction and Maintenance) 17

PLASTICS FABRICATOR OPERATOR 18

PLUMBER 19

POWER TRUCK OPERATOR 20

RADIO OPERATOR (Dispatcher) 21

RADIO OPERATOR (Ground) 22

STATIONARY ENGINEER 23

INDEX

MECHANICAL/TRANSPORTATION/CONSTRUCTION

Page

TOOL ROOM ATTENDANT 24

TRAFFIC ENGINEERING AIDE 25

TRUCK DRIVER (Local) 26

TRUCK DRIVER (Long Haul) 27

WELDER 28

JOB BRIEF

AIR TRAFFIC CONTROLLER
D.O.T. No: 193.168
D.O.T. Ref: Volume II, Page 261
Revision date: October 1973

THE JOB:

AIR TRAFFIC CONTROLLER: The safe, orderly, and expeditious movement of the thousands of airplanes flying day or night is entrusted to Air Traffic Controllers. They may work in an air route traffic control center or at a radar approach control.

RELATED OCCUPATIONS:

Aircraft Dispatcher
Operations Clerk
Transportation Agent
Cargo Agent
Airline Ticket and Reservations Agent
Agricultural Aircraft Pilot
Airplane Mechanic
Airline Pilot

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Physics
Speech
Electricity
Radio
Computer Programing
English

ADDITIONAL INFORMATION:

Many men engaged in this occupation are experienced pilots. A 4-year college degree or a combination of 3 years of college and related experience in a position of responsibility are necessary for employment. Armed forces experience in air traffic control may substitute for educational requirements. Applicants must pass a Civil Service examination and a physical examination. After being accepted, applicants are given 8 weeks of intensive training at a FAA aeronautical center. After an assignment to a job they are given additional classroom instruction and on-the-job training in specific problem areas. Total employment of this occupation is expected to remain about the same through 1975. Starting salary is $600 to $700 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

AIRPLANE MECHANIC

JOB BRIEF

D.O.T. No: 621.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

AIRPLANE MECHANIC: Airplane Mechanics keep airplanes operating safely and efficiently. Mechanics employed by the airlines work either at the terminals making emergency repairs or at an overhaul base making major repairs or periodic inspections. Those employed in general aviation normally work at airports servicing nonairline craft.

RELATED OCCUPATIONS:

Flight Engineer
Aircraft Assembler
Instrument Repairman
Small Engine Mechanic
Airplane Inspector
Automobile Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Physics
Mechanical Drawing
Machine Shop
Chemistry
Industrial Arts
Automotive Technology

ADDITIONAL INFORMATION:

Airplane Mechanics responsible for any repair or maintenance operation must be licensed with the Federal Aviation Administration (FAA). FAA approved mechanics schools have 18 - 24 month programs. Community colleges offer 2-year programs leading to the FAA examinations. The ability to work well with others, dependability, attentiveness to detail, and physical stamina are as important to the prospective Airplane Mechanic as mechanical ability. One must be able to withstand the noise of engines and power tools and work out of doors in all types of weather. Job opportunities vary but are somewhat limited. Salaries for a 40 to 48 hour work week range from $150 to $280.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AUDIOVISUAL SPECIALIST (Education)

JOB BRIEF

D.O.T. No: 099.168

D.O.T. Ref: Volume II, Page 237

Revision date: October 1973

THE JOB:

AUDIOVISUAL SPECIALIST (Education): Audiovisual Specialists plan the preparation and use of audiovisual aids and methods in schools. They review and evaluate films, records, and other teaching aids for clarity and educational value. They provide technical assistance to teachers in the preparation of visual aids and also are responsible for the maintenance and minor repair of equipment used. The specialist may conduct research projects to develop new audiovisual teaching methods and materials, and to determine effectiveness of current methods and materials.

RELATED OCCUPATIONS:

Projectionist
Video Technician
School Librarian
Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Crafts
Graphic Communications
Office Machine Repair
A.V. Techniques
Basic Electronics

ADDITIONAL INFORMATION:

An Audiovisual Specialist is usually a college graduate who has taken courses to prepare for this position. However, there are many part-time jobs for high school graduates who are working while attending college. This is an excellent way to gain experience in audiovisual techniques and equipment use. Salaries vary according to the number of hours worked. The full-time Audiovisual Specialist may earn from $175 per week depending on the area and school district where he is employed.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

BUS DRIVER

JOB BRIEF

D.O.T. No: 913.463

D.O.T. Ref: Volume II, Page 519

Revision date: October 1973

THE JOB:

BUS DRIVER: Bus Drivers operate large motor vehicles to transport passengers. Drivers may operate school buses for an educational district or drive for local public transportation systems, charter and sight-seeing services, or common carriers on intercity routes.

RELATED OCCUPATIONS:

Long Haul Truck Driver
Local Truck Driver
Chauffeur
Jitney Service
Delivery Service

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Auto Shop
Auto Mechanics
Driver Education
Driver Training

ADDITIONAL INFORMATION:

High school graduation or its equivalent is preferred and may be required by some companies. School Bus Drivers must have a valid first aid certificate. Prior experience in driving heavy vehicles is desirable. Most companies conduct training programs lasting from 2 weeks to 3 months which include classroom and driving practices, how to keep records, and how to deal tactfully and courteously with passengers. A physical examination may be given and the applicant may have to join a union and purchase a uniform. Many women find work driving school buses, but few are employed by common carriers. Salaries range from $120 to $180 for a 40 hour week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

CARPENTER

JOB BRIEF

D.O.T. No: 860.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

CARPENTER: Carpenters construct, erect, install, and repair structures and fixtures of wood, concrete, plywood, and wallboard, using hand tools and power tools.

RELATED OCCUPATIONS:

Cabinetmaker
Floor Installer
Roofer

JOB RELATED HIGH SCHOOL SUBJECTS:

Drafting
Industrial Arts
Mathematics
Building Technology
Blueprint Reading
Wood and Metal Shop

ADDITIONAL INFORMATION:

This is an apprenticeable trade. A high school diploma or equivalent may be required. A test is administered to applicants by the local joint apprenticeship council. There may be opportunities for advancement to supervisor, contractor, etc. in this trade. This occupation also affords an individual the opportunity to move to any area he chooses as there are jobs in most areas. Although construction had periods of leveling off in the last few years, the demand is expected to continue to increase. Apprentices start at $160 per week and can go to $270 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

CIVIL SERVICE APPRENTICE

JOB BRIEF

D.O.T. No: NONE

D.O.T. Ref: NONE

Revision date: October 1973

THE JOB:

CIVIL SERVICE APPRENTICE: Civil Service Apprentices perform tasks of increasing difficulty under supervision of skilled tradesmen while enrolled in a 4-year program of training leading to journeyman status in a particular trade.

RELATED OCCUPATIONS:

Aircraft Instrument Mechanic, Aircraft Engine Mechanic, Machinist, Aircraft Electrician, Automotive Mechanic, Sheet Metal Worker, Plumber, Aircraft Metalsmith, Carpenter, Pipefitter, Electrician, Aircraft Mechanic, Electronics Mechanic, Fire Control Mechanic, Heavy Duty Equipment Mechanic, Coppersmith, Blacksmith, Boatbuilder, Boiler Maker, Painter, Joiner, Molder, Rigger, Shipfitter, Shipwright, Welder

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Mathematics
Machine Shop
Metal Shop
General Science
Electricity
Wood Shop

ADDITIONAL INFORMATION:

Apprenticeship programs are open on military installations and at governmental offices. An eligibility test which includes mathematics through decimals and fractions, pattern making, spelling, and following oral instructions is given. In addition, in some cases one must pass an algebra test or have a B average in algebra in high school. In electrical trades, the test includes algebra, geometry and physics. The apprenticeship is presently 4 years in duration, including on-the-job training and classroom instruction. Such apprentices are expected to advance to supervisory, managerial, and planner positions. There is considerable competition for positions, but there are numerous openings. Future opportunities are good for such apprentices, both with the government and with outside industries. Weekly earnings range from $130 to $190.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

Mechanical/Transportation/Construction

COIN-VENDING MACHINE MECHANIC

JOB BRIEF

D.O.T. No: 639.281
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

COIN-VENDING MACHINE MECHANIC: Coin-Vending Machine Mechanics keep vending and coin-operated machines in good working condition. Because modern machines are complex, these mechanics may specialize in one type such as juke boxes, pinball machines, candy, food, or cigarette vending machines.

RELATED OCCUPATIONS:

Appliance Serviceman
Mechanic
Repairman
Parking Meter Serviceman/Repairman

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Electricity
Metals Shop
Auto Mechanics
Industrial Arts
Machine Repair

ADDITIONAL INFORMATION:

There are no formal educational requirements for entry into this occupation, but some mechanical skills are necessary to become a serviceman. As servicemen gain experience they are promoted to the position of mechanic. Desirable personal traits for a Coin-Vending Machine Mechanic are cleanliness neatness, and an overall good appearance as there is a great deal of public contact in this job. Success may depend on the mechanic's ability to deal with customers. Salaries range from $120 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

CONTROL ROOM TECHNICIAN
(Radio and Television)

JOB BRIEF

D.O.T. No: 957.282

D.O.T. Ref: Volume II, Page 516

Revision date: October 1973

THE JOB:

CONTROL ROOM TECHNICIAN (Radio and Television): Control Room Technicians in the radio and television industry operate and maintain equipment which insures that viewers and listeners see and hear technically good programing.

RELATED OCCUPATIONS:

Radio Announcer
Technical Director
Cameraman
Audioman
Boom Operator
Transmitter Man
Video Shader
Projectionist
Lighting Man

JOB RELATED HIGH SCHOOL SUBJECTS:

English
Speech
Drama
Industrial Arts
Radio and TV
Electricity/Electronics

ADDITIONAL INFORMATION:

Before becoming a Control Room Technician, it is necessary to receive training either in a private technical school, a community college, or a 4-year college. The best entry opportunities are at small or nonurban stations with eventual promotion to larger urban stations. This is a highly competitive field. Personal contacts are very important. Control Room Technicians work long hours and must have a great deal of drive as well as talent. Commercial television allows less freedom, while educational television encourages more creative work. Salaries range from $160 to $230 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

FIREMAN

JOB BRIEF

D.O.T. No: 373.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

FIREMAN: Firemen in city and town fire departments protect life and property from fire, whether it be a smoldering trash fire that can be brought under control with a hand fire extinguisher or a spectacular waterfront blaze requiring equipment from several fire companies.

RELATED OCCUPATIONS:

Fire Insurance Adjuster
Policeman

JOB RELATED HIGH SCHOOL SUBJECTS:

Science
Mathematics
Electricity
English
First Aid

ADDITIONAL INFORMATION:

The educational requirements for Firemen are a high school diploma or equivalent. Turnover in this occupation is quite low because it takes three years to train as a Fireman. Once a man is trained, he usually becomes a career employee. This can be a physically hazardous job. Firemen must be able to tolerate long hours of confinement. Competition is high. There are oral, written, and physical examinations, usually under Civil Service. There is opportunity for advancement in this occupation. The work week is approximately 56 hours--24 hours on and 24 hours off duty. One works 4 days out of 9. Salaries range from $220 to $250 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

IRONWORKER (Structural and Ornamental)

JOB BRIEF

D.O.T. No: 809.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

IRONWORKER (Structural and Ornamental): Structural and Ornamental Ironworkers are skilled construction tradesmen. Structural Ironworkers work in the basic construction process while Ornamental Ironworkers do finish work. Both share many of the same skills and duties.

RELATED OCCUPATIONS:

Sheet Metal Worker
Fabricator Assembler
Metal Fabricator
Metal Products Layout Man

JOB RELATED HIGH SCHOOL SUBJECTS:

Shop Mathematics
Metal Shop
Blueprint Reading
Mechanical Drawing
Industrial Arts
Welding

ADDITIONAL INFORMATION:

This occupation can be entered directly from high school. The apprenticeship requires a high school diploma or equivalent. The training program for apprentices covers 3 phases: Structural Ironworking, Reinforcing Ironworking, and Ornamental Ironworking. This trade has two apprentice programs. It should be noted that one of the apprentice programs covers outside construction and the other program covers inside shop work. They are operated independently through apprenticeship committees and the salaries differ. This field offers the best opportunities in construction due to the expanding demand in commercial building utilizing heavy structural steel and fabrication. A heavy demand is expected in the coming decade in this occupation. Salary starts at $180 to $200 per week and after 3 years, journeymen receive about $240 to $260 per week for 40 hours.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

MACHINIST

JOB BRIEF

D.O.T. No: 600.280

D.O.T. Ref: Volume II, Page 430

Revision date: October 1973

THE JOB:

MACHINIST: Journeymen or all-round Machinists carry to completion the construction or repair of metal parts, tools, and machines from written specifications such as blueprints, engineering sketches or dimensions.

RELATED OCCUPATIONS:

Draftsman
Tool and Die Maker
Machine Tool Operator
Instrument Maker
Patternmaker

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics
Machine Shop
Mechanical Drawing
Industrial Arts

ADDITIONAL INFORMATION:

The best way to get started in this trade is to apply for a 4-year apprenticeship. A high school and/or vocational school background is usually required. A moderate increase in the number of all-round Machinists is expected throughout the '70s. This industry, however, is greatly affected by the state of the economy. Several community colleges offer machine technology training. After becoming a journeyman, the Machinist may become a tool and die maker or instrument maker or may become skilled in other technical jobs in process planning, machine programming or tooling. Salaries for an apprentice begin at $140 per week. A journeyman earns between $200 and $240 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 899.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

MAINTENANCE MAN: Maintenance Men are employed in factories and office buildings as well as in many other settings. They are primarily responsible for the maintenance of physical structures and equipment. They use hand and power tools in their jobs.

RELATED OCCUPATIONS:

Repairman
Custodian

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Basic Mathematics
Machine Shop
Welding

ADDITIONAL INFORMATION:

There are no formal educational requirements for Maintenance Men. Although a test is not usually given except on Civil Service jobs, experience in the trades (carpentry, plumbing, etc.) is desired. Maintenance Men are expected to have some experience with mechanics. Future prospects for well-qualified Maintenance Men are increasing. Additional training is given on the job. Starting salary is $130 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MAINTENANCE MECHANIC (Industrial)

JOB BRIEF

D.O.T. No: 638.281

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

MAINTENANCE MECHANIC (Industrial): Maintenance Mechanics dismantle machines and other equipment, repair or replace parts, and reassemble equipment in industrial and manufacturing firms such as aircraft, food processing, dairy, etc. Depending on the plant, an Industrial Maintenance Mechanic will do a wide variety of maintenance, such as maintaining heating and ventilating equipment and maintaining complex machines.

RELATED OCCUPATIONS:

Air Conditioning and Refrigeration Mechanic
Aircraft Loftsman
Appliance Technician
Manipulator Operator
Airframe and Powerplant Mechanic
Auto Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
General Mathematics
Machine Shop
Mechanical Drawing/Drafting
Applied Physical Science
Auto Shop

ADDITIONAL INFORMATION:

A high school diploma is not required, but is preferred by many employers. There is no formal training for the job, but some trade schools and community colleges provide training in the use of tools. Ability to work with tools, understand functions of machinery, and willingness to work are the primary qualifications to obtain a job as a Maintenance Mechanic. Experience is usually required, either as a helper to a Maintenance Mechanic or in a related field such as auto mechanics. There is a great demand for Maintenance Mechanics with good backgrounds. A mechanical comprehension test may be given. Salaries range from $120 to $190 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MEAT CUTTER (Retail)

JOB BRIEF

D.O.T. No: 316.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

MEAT CUTTER (Retail): Retail Meat Cutters or Butchers cut, arrange, wrap, and display meats, fish, and fowl for sale to customers in retail markets.

RELATED OCCUPATIONS:

Wholesale Meat Cutter	Slaughterhouse Employee
Butcher - Chicken and Fish	Meat Jobber

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

This is an apprenticeable trade; hence, application should be made directly to the local Meat Cutters Union. Applicants should be high school graduates. They must attend related classroom instruction. This is a 2-year apprenticeship with a beginning trainee salary of $100 per week. All apprentices must belong to the union and pay an initiation fee of about $150. This is payable in installments on a pay-as-you-earn basis. There is no demand for Meat Cutters at present. Salaries range from $100 to $210 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MECHANICAL-ENGINEERING TECHNICIAN

JOB BRIEF

D.O.T. No: 007.181
D.O.T. Ref: Volume II, Page 379
Revision date: October 1973

THE JOB:

MECHANICAL-ENGINEERING TECHNICIAN: Mechanical-Engineering Technicians apply theories and principles of mechanical engineering to develop and test machinery and equipment under the direction of engineers and physical scientists. Technicians prepare detailed drawings and may develop mechanical components for test and experimentation. They are primarily concerned with the production, transmission, and use of power.

RELATED OCCUPATIONS:

Electronics Technician
Sound-Effects Man
Engineering Aide
Tool Designer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Mathematics
Industrial Arts
Physical Science
Electronics
Metal Shop

ADDITIONAL INFORMATION:

Graduation from a technical institute or completion of specialized programs in community colleges or universities is usually required for entry into this field. However, there are 3 to 4-year apprenticeship programs available which provide the necessary training for employment as a Mechanical-Engineering Technician. Employment opportunities for the '70s are good and should increase rapidly as industrial research, development, and production increase. A beginning Mechanical-Engineering Technician earns approximately $150 per week and can advance to approximately $270 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

OPERATING ENGINEER

JOB BRIEF

D.O.T. No: 859.883

D.O.T. Ref: Volume II, Page 444

Revision date: October 1973

THE JOB:

OPERATING ENGINEER: Operating Engineers operate power-driven equipment used in construction and maintain and perform repairs on various types of construction machinery.

RELATED OCCUPATIONS:

Diesel Mechanic
Local Truck Driver
Heavy Equipment Operator
Transportation Service Worker
Power Truck Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Mechanical Drawin[illegible]
Auto Shop
Electrical Shop
Shop Mathematics

ADDITIONAL INFOR[illegible]ION:

There are no set edu[illegible]onal requirements for entry into this field. This is an apprenticeable [illegible]e requiring membership in the local Operating Engineers Union. For [illegible]on membership one must be over 18 years of age. This occupation includes many branches; for example, heavy duty equipment operator, plant equipment operator, dredging, grading, paving, and others. Operators must be in good physical condition and enjoy working out of doors. There are periods of unemployment as the work is seasonal. The starting salary for apprentices is about $200 for a 40-hour week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PAINTER (Construction and Maintenance)

JOB BRIEF

D.O.T. No: 840.781
D.O.T. Ref: Volume II, Page 319
Revision date: October 1973

THE JOB:

PAINTER (Construction and Maintenance): Construction and Maintenance Painters have a knowledge of paints and other covering materials which they apply as decorative and protective coatings to all kinds of structures. The qualified journeyman can perform all the functions of any project.

RELATED OCCUPATIONS:

Paper Hangers
Plasterers
Floorcovering Installer

JOB RELATED HIGH SCHOOL SUBJECTS:

Art
Industrial Arts

ADDITIONAL INFORMATION:

A high school diploma or equivalent is usually required for acceptance into an apprenticeship program. In most cases Painters serve a 3 to 4-year apprenticeship. At present, few apprentices are being accepted; however, students with good potential in the field should be encouraged. Those interested in apprenticeship should contact the local Painters Union. The union may place them or they may then seek their own employment. A craft work aptitude test is required. The test may be given by the state employment service. Salaries range from $180 to $370 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

PLASTICS FABRICATOR OPERATOR

JOB BRIEF

D.O.T. No: 754.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

PLASTICS FABRICATOR OPERATOR: Plastics Fabricator Operators work with sheet, rod, tube, film and other forms of plastic to make them into finished products according to blueprint and mold forms. They lay out cutting lines, use fine measuring and cutting instruments, finish end products, verify dimensions and examine for defects.

RELATED OCCUPATIONS:

- Sheet Metal Worker
- Tool & Die Maker
- Reinforced Plastics Operator
- Thermo-Forming Operator
- Lay-up Operator
- Extruder Operator
- Laminator Operator
- Chemical Engineer

JOB RELATED HIGH SCHOOL SUBJECTS:

- Chemistry
- Drafting
- General Mathematics
- Industrial Arts

ADDITIONAL INFORMATION:

Plastics is a fast growing major American industry. High school graduates with some background in mathematics and chemistry can be hired into 4 to 6-year apprenticeship programs. Community colleges sometimes have a 2-year program for Plastics Technicians with an associate of science degree. There is a shortage of trained plastics personnel in the processing industries. Apprenticeship programs are usually 4 to 6 years and starting salaries are about $100 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PLUMBER

JOB BRIEF

D.O.T. No: 862.381
D.O.T. Ref: Volume II, Page 312
Revision date: October 1973

THE JOB:

PLUMBER: Plumbers and Apprentice Plumbers install, repair, and maintain piping systems used to carry water, steam, waste, and gases required for homes, businesses, and other structures.

RELATED OCCUPATIONS:

Pipe Fitter
Sheet Metal Worker
Welder

JOB RELATED HIGH SCHOOL SUBJECTS:

Blueprint Reading
General Mathematics
Mechanical Drawing
Industrial Arts

ADDITIONAL INFORMATION:

Plumber applicants are required to take a test covering basic mathematics. One must serve a 5-year apprenticeship before qualifying as a journeyman Plumber. The demand is not great for apprentices; few are accepted into the union each year. The demand is not expected to increase. Openings exist primarily for replacement needs. Qualified applicants are placed on a waiting list. It is possible to become a Plumber through a Naval Ship Yard Apprenticeship Program, but the prospects are poor because few are being employed. Apprentice Plumbers start at 40% of the journeyman wage which is about $280 to $320 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

POWER TRUCK OPERATOR

JOB BRIEF

D.O.T. No: 922.883

D.O.T. Ref: Volume II, Page 444

Revision date: October 1973

THE JOB:

POWER TRUCK OPERATOR: Power Truck Operators move raw materials and products using various types of power trucks that may carry several tons of material and stock it as high as eighteen feet in the air. They may move material in supply yards and warehouses using fork-lift trucks to pick up, carry, and stock or load the materials. They may be required to handle invoices and maintain inventories of materials they handle.

RELATED OCCUPATIONS:

Industrial Truck Operator
Straddler Truck Operator
Heavy Equipment Operator
Operating Engineers
Ship Unloader

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Driver Training
Auto Shop

ADDITIONAL INFORMATION:

There are no specific educational requirements set for entry into this field. On-the-job training is the usual method of acquiring the skills required of the Power Truck Operator. It may be necessary to pass a physical examination as a condition of employment and to join a union. Presently, opportunities for employment are good in many metropolitan areas. Starting salary is about $200 a week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

RADIO OPERATOR (Dispatcher)

JOB BRIEF

D.O.T. No: 379.368

D.O.T. Ref: Volume II, Page 265

Revision date: October 1973

THE JOB:

RADIO OPERATOR (Dispatcher): Radio Operators or Dispatchers communicate with personnel in the field by the use of 2-way radio units. Most Operators are government service workers.

RELATED OCCUPATIONS:

Airline Dispatcher
Switchboard Operator
Receptionist

JOB RELATED HIGH SCHOOL SUBJECTS:

Speech
Electronics
Typing

ADDITIONAL INFORMATION:

Most positions are with various governmental agencies, including police and fire departments; however, openings are also found with taxicab, trucking, and tow service companies. Civil Service positions require a test and often 1 or 2 years work experience such as clerical or business experience. A 3rd class FCC Radio-Telephone license is required. Future prospects appear constant with slow increases. Radio Operators should have a good memory, a clear speaking voice, be agile, be able to use either hand, have a tolerance for working in close quarters, and be able to tolerate shift changes periodically. Training is provided on the job. Salaries range from $120 to $210 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

RADIO OPERATOR (Ground)
D.O.T. No: 193.282
D.O.T. Ref: Volume II, Page 517
Revision date: October 1973

THE JOB:

RADIO OPERATOR (Ground): Ground Radio Operators transmit highly important messages concerning weather conditions and other flight information between ground station personnel and flight personnel by use of a radio-telephone.

RELATED OCCUPATIONS:

Airline Dispatcher
Radio Field Engineer
Radio-Telegraph Operator
Radio Dispatcher

JOB RELATED HIGH SCHOOL SUBJECTS:

Speech
Radio/TV
Typing
Electronics

ADDITIONAL INFORMATION:

Either a high school diploma or equivalent is usually required. Airline Radio Operators serve probationary periods during which they receive on-the-job training. An FCC Radio license is necessary. Community colleges offer courses in preparation for the FCC 2nd Class Radio-Telephone examination and license. Operators should be able to work calmly and accurately under pressure and emergency situations as well as type 40 words a minute. Openings for entry level positions are expected to be very low because overall employment of Radio Operators is declining due to the use of more automatic communications equipment. Salaries for a 40 to 48-hour work week range from $100 to $250.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

STATIONARY ENGINEER

JOB BRIEF

D.O.T. No: 950.782

D.O.T. Ref: Volume II, Page 435

Revision date: October 1973

THE JOB:

STATIONARY ENGINEER: Stationary Engineers operate and maintain equipment in industrial plants and other buildings for power generation, heating, ventilation, humidity control, and air conditioning. Their primary responsibility is the safe and economical operation of this equipment.

RELATED OCCUPATIONS:

Maintenance Mechanic
Maintenance Electrician
Mechanical Engineer
Refrigeration Mechanic
Machine Operator

JOB RELATED HIGH SCHOOL SUBJECTS:

Mechanical Drawing
Electricity
Industrial Arts
Metal Shop

ADDITIONAL INFORMATION:

Limited opportunities exist for the young high school graduate seeking entrance into this occupation. Entrance can be made through the local Stationary Engineers union offices. A test is administered to all applicants. The beginning apprentice's salary begins at 65% of the journeyman's wage, which is presently over $5.00 an hour. Wages for the journeyman vary depending upon the industry in which the operating engineer is working; e.g., hotels, breweries, laundries, dairies, ice plants, schools, etc., but apprentices may expect $120 or more per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

TOOL ROOM ATTENDANT

JOB BRIEF

D.O.T. No: 223.387
D.O.T. Ref: Volume II, Page 271
Revision date: October 1973

THE JOB:

TOOL ROOM ATTENDANT: Tool Room Attendants are responsible for sorting, issuing, and receiving all kinds of hand and power tools used in the shop. They also are responsible for maintaining records and inventory.

RELATED OCCUPATIONS:

Machinist
Auto Parts Man
Auto Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Industrial Arts
Basic Mathematics
Auto Mechanics
Machine Shop

ADDITIONAL INFORMATION:

This is a good entry job for a person who would like to apply for an apprenticeship in the future. A high school diploma would be desirable since it might be necessary in order to advance to more responsible jobs. Legible handwriting is stressed. Tool Room Attendants can eventually advance to better paying jobs in the clerical field if desired. It would be a good opportunity to evaluate various jobs in a shop in order to plan for the future. Employment opportunities are expected to increase slowly. Without experience Tool Room Attendants start at $170 per week and can rise to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

TRAFFIC ENGINEERING AIDE

D.O.T. No: 199.288

D.O.T. Ref: Volume II, Page 383

Revision date: October 1973

THE JOB:

TRAFFIC ENGINEERING AIDE: Traffic Engineering Aides help investigate traffic safety problems, assist in designing traffic control installations, and design parking lots. They may also supervise the taking of traffic counts and other surveys.

RELATED OCCUPATIONS:

Civil Engineer
Draftsman
Quality Control Technician
Planning Aide

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Mathematics
Drafting
Physics

ADDITIONAL INFORMATION:

A high school education is the absolute minimum and a 4-year college degree is becoming necessary for entry into this field. Most job opportunities for Traffic Engineering Aides occur in governmental agencies in urban centers. Although there is an increasing number of cars and increasing population, this field is relatively small and there are not a great number of job openings. Salaries range from $490 per month for beginning Traffic Engineering Aides to $870 for more experienced workers.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

Mechanical/Transportation/Construction

TRUCK DRIVER (Local)

JOB BRIEF

D.O.T. No: 906.883
D.O.T. Ref: Volume II, Page 444
Revision date: October 1973

THE JOB:

TRUCK DRIVER (Local): Local Truck Drivers work within a metropolitan area, picking up, transporting, and delivering materials, goods, and products of all kinds. They also perform related duties which may vary widely from job to job.

RELATED OCCUPATIONS:

Long Haul Truck Driver
Routeman
Messenger

JOB RELATED HIGH SCHOOL SUBJECTS:

Driver Education
Auto Mechanics
Industrial Arts

ADDITIONAL INFORMATION:

Employment in this occupation is steady but is not increasing rapidly. It is controlled by the Teamsters Union in most metropolitan areas, and most high school graduates enter the occupation as a helper or lumper, as he is called, and eventually move into a driving slot. The short haul driver must pass a test as administered by the Department of Motor Vehicles for the appropriate license (truck and trailer, or smaller truck). For the young man who wants to drive a truck, the best way of getting into the union would be to get a job first, and the employer will get the employee into the union. Salary for short haul Truck Drivers is about $240 per week. Many part-time jobs open up during the summer for lumpers or drivers, and this is the time to get acquainted with the union personnel.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

TRUCK DRIVER (Long Haul)

JOB BRIEF

D.O.T. No: 905.883

D.O.T. Ref: Volume II, Page 444

Revision date: October 1973

THE JOB:

TRUCK DRIVER (Long Haul): Long Haul Truck Drivers operate large and expensive truck carriers hauling cargo hundreds of miles to a destination or unloading point. These drivers operate transportation rigs such as tractor-trailer, tractor-semitrailer and, in some instances, tractor-semitrailer and trailer combination units that may cost from $20,000 to $40,000.

RELATED OCCUPATIONS:

Local Truck Driver
Heavy Equipment Operator
Driver Salesman

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Mathematics
Driver Education
Auto Mechanics

ADDITIONAL INFORMATION:

Opportunities for entrance into this occupation by high school or community college students are not available. Men who drive these truck-trailer combinations are those who have been high on the seniority list with the local or short haul drivers and have the experience they need to move into the Long Haul Truck Driver slot. Regulations state that the driver must be at least 25 years of age and have the appropriate heavy truck driver's license. A person must gain experience as a local truck driver, then at a later time he may apply for entry into the brief training program of a trucking firm which employs long-distance truck drivers. This is not an ideal job for a family man, as Long Haul Drivers are continually on the road. Salaries start at $6.00 and rise to over $7.00 per hour. Many Long Haul Truck Drivers make, with overtime, as much as $20,000 per year.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

WELDER

JOB BRIEF

D.O.T. No: 812.884

D.O.T. Ref: Volume II, Page 322

Revision date: October 1973

THE JOB:

WELDER: Welders join pieces of metal together by placing them next to each other and melting the adjacent surfaces, causing them to flow together to achieve a strong bond.

RELATED OCCUPATIONS:

Sheet Metal Worker
Structural Ironworker
Structural Steel Worker
Welding Supervisor

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Mathematics
General Science
Mechanical Drawing
Electricity
Metal Shop
Welding

ADDITIONAL INFORMATION:

High school graduation is generally required. There are several means of entering this occupation: apprenticeships, community college training, or on-the-job training. To enter the apprenticeship program at military installations, one must pass an examination which includes mathematics through decimals and fractions, patternmaking, and spelling. Community colleges offer programs for welders. At military installations there is considerable competition for positions in apprenticeship but few apprentices will be accepted out of many applicants. The community college can prepare a person for a variety of positions. There is a continuing need for Welders. Salaries range from about $100 to $200 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

INDEX

SCIENTIFIC/MATHEMATICS/MEDICINE

Page

AIRLINE PILOT/COPILOT 1
AMBULANCE DRIVER 2
ANIMAL KEEPER 3
BIOLOGICAL SCIENTIST 4
LABORATORY TECHNICIAN 5
LIFE SCIENTIST, see BIOLOGICAL SCIENTIST . . . .
MATHEMATICIAN 6
OCEANOGRAPHER 6a
OCCUPATIONAL THERAPIST 7
OPTICAL BENCHMAN 8
OPTOMETRIST 9
PHYSICIST 10
PROSTHETIST-ORTHOTIST 11
SURVEYOR 12
TECHNICAL DIRECTOR (Radio and Television Broadcasting) . . 13
TECHNICAL WRITER 14
VETERINARIAN 15
VETERINARIAN ATTENDANT, see ANIMAL KEEPER . . . .
ZOOKEEPER, see ANIMAL KEEPER . . . .

AIRLINE PILOT/COPILOT

JOB BRIEF

D.O.T. No: 196.283

D.O.T. Ref: Volume II, Page 422

Revision date: October 1973

THE JOB:

AIRLINE PILOT/COPILOT: Airline Pilots are responsible for operating multimillion dollar planes and transporting passengers safely.

RELATED OCCUPATIONS:

Agricultural Aircraft Pilot
Test Pilot
Missile Control Pilot
Air Force Pilot
Air Freight Agent
Air Traffic Controller
Flight Engineer

JOB RELATED HIGH SCHOOL SUBJECTS:

Physics
Geometry
Algebra
Trigonometry
Mechanical Drawing
Industrial Arts

ADDITIONAL INFORMATION:

To qualify for the Airline Pilot or Copilot job, one must be a high school graduate with an "A-B" grade average. At least two years of college is highly recommended. A number of community colleges offer ground school and flight training programs in preparation for the FAA Pilot's Examination. Physical requirements are specific and exacting: 21 to 30 years of age; 5'6" to 6'4" in height; under 200 pounds in weight; 20/20 vision uncorrected; and the ability to remain calm under pressure. Many pilots receive their training in the armed forces. Job opportunities are limited. Most openings now are to be found with crop-dusting and charter firms. Salaries range from $150 to $200 per week in the first year. A captain on a 747 Jet makes approximately $4,000 a month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

AMBULANCE DRIVER

JOB BRIEF

D.O.T. No: 913.883
D.O.T. Ref: Volume II, Page 444
Revision date: October 1973

THE JOB:

AMBULANCE DRIVER: Ambulance Drivers are employed by ambulance companies to transport injured, ill, and convalescent persons. They also give first aid when necessary.

RELATED OCCUPATIONS:

Hospital Orderly
Truck Driver
Transportation Service Worker

JOB RELATED HIGH SCHOOL SUBJECTS:

Driver Education
First Aid

ADDITIONAL INFORMATION:

One can qualify for a job as Ambulance Driver without a high school diploma, but the chances for employment are better with one. Applicants must be 18 years of age and have a standard driver's license plus an ambulance driver's certificate in some states. An advanced first aid certificate may be required. On-the-job training is usually provided because of the specialized nature of this work. Employment prospects are good because the turnover rate is high. Salaries range from $110 to $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

ANIMAL KEEPER

JOB BRIEF

D.O.T. No: 356.874
D.O.T. Ref: Volume II, Page 511
Revision date: October 1973

The Job:

ANIMAL KEEPER: Animal Keepers feed and tend to the needs of animals kept in places other than in a home or on a farm. They may be employed by a veterinarian, kennel, zoo, pound, retail store, or in an educational or medical research center.

Related Occupations:

Veterinary Assistant
Kennelman
Dog Groomer

Job Related High School Subjects:

Biology
Zoology

Additional Information:

Employment in this field is steady and available in basically three areas: working at a zoo, for the S.P.C.A., or for a pet shop. Pet shops are a good place to begin either on a full or a part-time basis to learn the basics of animal care. A full-time person working for a pet store can make as much as $500 per month. Part-time help will generally make the going minimum wage. Most zoos have positions with the title Animal Keeper. There are different types of Civil Service positions with a Civil Service test required and a salary range of about $550 to $670 per month for a 5-day week. Work of this type with S.P.C.A. comes under the title of Animal Control Officer, with a salary range of about $420 to $600 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

BIOLOGICAL SCIENTIST
D.O.T. No: 041.081
D.O.T. Ref: Volume II, Page 466
Revision date: October 1973

THE JOB:

BIOLOGICAL SCIENTIST: Biological Scientists, also known as life scientists, are professional researchers or teachers who study living organisms and the processes that determine the nature of life. They are concerned with men, microbes, plants, animals, health and disease, as well as how these organisms relate to the environment.

RELATED OCCUPATIONS:

Chemist
Microbiologist
Oceanographer
Laboratory Assistant
Medical Technologist

JOB RELATED HIGH SCHOOL SUBJECTS:

College preparatory courses in science

ADDITIONAL INFORMATION:

Applicants for this field need a minimum of a bachelor's degree and the best employment opportunities are for holders of a doctoral degree. Biological Scientists can work in the field of education, agriculture, biology, or medicine. Salary depends on education and particular field but ranges from $250 to $670 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LABORATORY TECHNICIAN

JOB BRIEF

D.O.T. No: 029.381

D.O.T. Ref: Volume II, Page 418

Revision date: October 1973

THE JOB:

LABORATORY TECHNICIAN (Industrial Chemical Industry): Laboratory Technicians assist chemists and engineers in research and development work and in production control. Technicians also perform many routine tests in a commercial laboratory operation.

RELATED OCCUPATIONS:

Laboratory Assistant
Chemical Engineer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Biology
Chemistry
Physics
Algebra
Geometry
Trigonometry
Foreign Language
(French or German)

ADDITIONAL INFORMATION:

Laboratory Technicians are usually involved with quality control work. High school graduation is required, and most employers would prefer a community college graduate or a 4-year college graduate. Job prospects in this occupational area are fair. Some employers require that technicians be over 20 years of age. Salary ranges vary and depend upon education and experience in quality control work. Generally, Laboratory Technicians begin at about $550 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MATHEMATICIAN

JOB BRIEF

D.O.T. No: 020.088

D.O.T. Ref: Volume II, Page 468

Revision date: October 1973

THE JOB:

MATHEMATICIAN: Mathematicians are professional scientists who conduct research in the theory of or application of mathematics to solve problems in various fields such as science, engineering, military planning, electronic data processing, insurance, and other areas.

RELATED OCCUPATIONS:

Information Scientist
Statistician
Systems Analyst
Computer Programmer
Actuary

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics (through Calculus)
Science
Physics

ADDITIONAL INFORMATION:

The minimum educational requirement for positions in this field is a bachelor's degree in mathematics. Graduate study is desirable for advancement to more responsible positions. Mathematicians are employed primarily in private industry, colleges or universities, or in governmental agencies. Employment opportunities are expected to be good through the '70s particularly for Mathematicians with graduate degrees. However, there is expected to be considerable competition for entry positions for those with a bachelor's degree. Monthly salaries range from $870 for beginning Mathematicians with a bachelor's degree to $1,460 per month for beginning Mathematicians with a Ph.D degree. Federal government salaries are slightly lower.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

OCEANOGRAPHER

D.O.T. No: 041.081

D.O.T. Ref: Volume II, Page 466

Revision date: October 1973

THE JOB:

OCEANOGRAPHER: Oceanographers study the characteristics, physical properties, movement, and plant and animal life of the ocean. They perform tests, make observations, and conduct surveys and experiments from ships or stationary platforms in the sea and from laboratories on land. Most Oceanographers are specialists in one of the branches of the profession and are known by that title; for example, biological oceanographers are known as Marine Biologists and physical oceanographers are known as Physicists and Geophysicists.

RELATED OCCUPATIONS:

Biologist
Geologist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Chemistry
Biology
Physics

ADDITIONAL INFORMATION:

The minimum educational requirement for beginning professional oceanographic positions is a bachelor's degree with a major in an area such as biology, oceanography, or a geoscience. With this training, jobs such as a research or laboratory assistant, or oceanographic technician can be obtained. These jobs generally consist of routine data collection, analysis, or computation. For research or teaching positions in the field, graduate training is required. Employment opportunities are not plentiful but some are available at colleges, universities, government agencies, institutions, and private industries. Salaries for entry-level government workers with a bachelor's degree approximate $175 per week. Salaries for entry-level positions in private industry are slightly higher.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

OCCUPATIONAL THERAPIST

JOB BRIEF

D.O.T. No: 079.128

D.O.T. Ref: Volume II, Page 475

Revision date: October 1973

THE JOB:

OCCUPATIONAL THERAPIST: Occupational Therapists plan and organize medically oriented occupational programs in hospitals or similar institutions to rehabilitate physically or mentally ill patients, using creative arts, recreational, educational, and social activities. Occupational Therapists write reports on the patient's progress in occupational therapy and may make and fit devices such as splints and braces under the direction of a physician.

RELATED OCCUPATIONS:

Physical Therapist
Occupational Therapy Aide

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Biology
Photography
Crafts
Health Sciences
Art
Chemistry

ADDITIONAL INFORMATION:

Entry into this type of work generally requires graduation from a college or university offering courses in the therapeutic specialties. In some colleges this is a 5-year degree. A legal or professional certification, attained by examination, is also required. Most positions occur in hospitals, clinics, homes for the aged, or rehabilitation centers. Employment opportunities are expected to be excellent through the '70s. Salaries for Occupational Therapists range from $660 for entry level to $900 per month for more experienced staff.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

OPTICAL BENCHMAN

JOB BRIEF

D.O.T. No: 711.381

D.O.T. Ref: Volume II, Page 312

Revision date: October 1973

THE JOB:

OPTICAL BENCHMAN: Optical Benchmen mark and cut ground and polished lenses to fit the lens frame, and bevel or smooth the edges of the lenses and frame parts into finished eyeglasses.

RELATED OCCUPATIONS:

Lens Grinder
Dispensing Optician
Optical Mechanic

JOB RELATED HIGH SCHOOL SUBJECTS:

Science
Physics
Mechanical Drawing
Algebra
Geometry
Industrial Arts

ADDITIONAL INFORMATION:

This occupation is a 5-year apprenticeable occupation through the Optical and Technician Workers Union. The union requires a high school diploma or equivalent. Some companies administer aptitude tests to their employees. Optical Benchmen may be employed by optical companies in metropolitan areas. Employment is steady, but few people enter this occupation. More and more women are being employed in this field. The minimum employment age is 18. For the new apprentice, salaries begin at $110 per week and for the journeyman $180 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

OPTOMETRIST

JOB BRIEF

D.O.T. No: 079.108

D.O.T. Ref: Volume II, Page 473

Revision date: October 1973

THE JOB:

OPTOMETRIST: Optometrists examine eyes, sometimes using complicated equipment; prescribe medicine, surgery, or lenses to improve peoples' eyesight. They also supply eyeglasses and contact lenses for patients.

RELATED OCCUPATIONS:

Ophthalmologist
Audiologist
Optician

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Mathematics
Chemistry
Physics
Biology
Physiology
Anatomy

ADDITIONAL INFORMATION:

Optometrists must have 2 years of preoptometry training at an approved college or university, 4 years of training at an approved optometry school, and then pass a state examination in order to work as an Optometrist. Over 90% of all Optometrists are employed in private practice; the others work in clinics, hospitals, or optical instrument manufacturing firms. Employment opportunities are good for new Optometrists in towns and small cities. Optometrists usually receive salaries the first several years that average about $900 per month. After developing a practice, they may receive very high salaries.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PHYSICIST

JOB BRIEF

D.O.T. No: 023.081
D.O.T. Ref: Volume II, Page 466
Revision date: October 1973

THE JOB:

PHYSICIST: Physicists are professional scientists who conduct research in physics and apply laws and theories of physics to industry, medicine, and other fields. Physicists perform experiments with mechanical, optical, and electronic instruments to observe structure of matter, relationships between matter and energy and other physical phenomena.

RELATED OCCUPATIONS:

Astronomer
Chemist
Electronics Technician
Engineer
Mathematician

JOB RELATED HIGH SCHOOL SUBJECTS:

Physics
Mathematics (through calculus)
Electronics
Chemistry

ADDITIONAL INFORMATION:

For employment as a Physicist, a bachelor's degree in physics is the minimum educational requirement; however, a master's or doctorate are necessary for advancement or responsible positions in physics. Physicists are employed in colleges or universities as teachers or as researchers in private industry and in governmental agencies. Employment opportunities are expected to be good through the '70s and graduate training is increasingly more important for employment. Average salaries for beginning Physicists with a bachelor's degree are $900 per month in private industry.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

PROSTHETIST-ORTHOTIST

JOB BRIEF

D.O.T. No: 078.368

D.O.T. Ref: Volume II, Page 477

Revision date: October 1973

THE JOB:

PROSTHETIST-ORTHOTIST: Prosthetists and Orthotists write specifications for and fit artificial limbs, braces, and appliances for body deformities and disorders following prescriptions from physicians. One who specializes in the making and fitting of artificial limbs is knows as a Prosthetist. The Orthotist specializes in the making and fitting of orthopedic braces.

RELATED OCCUPATIONS:

Chiropractor's Assistant
Physical Therapist
Occupational Therapist/Aide
Nurse

JOB RELATED HIGH SCHOOL SUBJECTS:

Biology
Industrial Arts

ADDITIONAL INFORMATION:

There are no formal educational requirements, but a high school diploma is important. This is an apprenticeship program. Some medical schools have programs for Prosthetist-Orthotists. Although total employment is small, there is no oversupply of trained people. Salaries start at about $110 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

Scientific/Mathematics/Medicine

SURVEYOR

JOB BRIEF

D.O.T. No: 018.188

D.O.T. Ref: Volume II, Page 385

Revision date: October 1973

THE JOB:

SURVEYOR: Surveyors determine the exact location and measurement of points, elevations, lines, areas, and contours of the earth's surface for use in construction, mapmaking, mining, and land valuation. Surveyors use measuring instruments and make mathematical calculations. Surveyors may also supervise a 3 to 6 member field party. Specialization in areas such as highway, land, or mineral surveys is common.

RELATED OCCUPATIONS:

Navigator
Draftsman
Civil Engineer
Instrument Man
Rod and Chain Man

JOB RELATED HIGH SCHOOL SUBJECTS:

Geography
Geometry
Trigonometry
Drafting
Algebra
Calculus
Mechanical Drawing

ADDITIONAL INFORMATION:

Entry into this field usually is based on completion of a 1, 2, or 3 year post-secondary program in a vocational school or community college; however, it is possible to begin as a rod and chain man and advance to the position of Surveyor. Most Surveyors are employed by a government agency or by a construction firm. Most work is done outdoors. Governmental agencies require Surveyors to pass a Civil Service examination. All states require land Surveyors to be licensed. This is achieved by examination and 4 to 8 years of experience. Employment opportunities will be good in the '70s for those with post-secondary training in surveying. Beginning salaries are $160 per week and may progress to $270 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

TECHNICAL DIRECTOR
(Radio and Television Broadcasting)

D.O.T. No: 963.168

D.O.T. Ref: Volume II, Page 375

Revision date: October 1973

THE JOB:

TECHNICAL DIRECTOR (Radio and Television Broadcasting): Technical Directors coordinate the activities of radio or television studio and control room personnel to insure the technical quality of pictures and sound.

RELATED OCCUPATIONS:

Cameraman
Station Program Director
Photographer

JOB RELATED HIGH SCHOOL SUBJECTS:

Photography
Communication Graphics
Radio Electronics
Cinematography

ADDITIONAL INFORMATION:

High school graduation is required, as is an FCC Radiotelephone Operator's license. Technical Directors must be able to work under pressure of a rigid time schedule and work well with others. Color perception, good judgment, dependability, and precision are important attributes of prospective Technical Directors. Some community colleges operate closed-circuit TV and radio stations under student direction. Both are excellent opportunities to gain experience. Boom or dolly pusher or microphone operator are usual beginning assignments. Some radio stations or television channels hire students as summer relief. Salaries for a 40-hour week range from $150 to $260.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

TECHNICAL WRITER
D.O.T. No: 139.288
D.O.T. Ref: Volume II, Page 387
Revision date: October 1973

THE JOB:

TECHNICAL WRITER: Technical Writers interpret scientific and engineering developments by assembling, analyzing, and recording information in forms that suit the specific needs of readers, whether policymakers, administrators, technicians, craftsmen, or the public.

RELATED OCCUPATIONS:

Trade Journal Writer
Specifications Writer
Process Description Writer
Copy Writer
Advertising Promotional Material Writer

JOB RELATED HIGH SCHOOL SUBJECTS:

Journalism
English
Industrial Arts
Science
Mathematics
Physics
Graphic Communications

ADDITIONAL INFORMATION:

Students wishing to enter this field must be positively motivated. They should have a background in science, electronics, or engineering. Most employers give applicants a test to measure their knowledge of the use of terminology, publications practice, and their technical knowledge. Technical Writers must have post-high school training. Technical Writers start at $120 per week and can make as much as $280 per week depending upon their experience and technical knowledge.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

VETERINARIAN

JOB BRIEF

D.O.T. No: 073.108

D.O.T. Ref: Volume II, Page 473

Revision date: October 1973

THE JOB:

VETERINARIAN: Veterinarians diagnose, treat, and control diseases and injuries afflicting animals. They perform surgery, prescribe medicine, and administer drugs. Veterinarians usually specialize in the type of animal they wish to treat, such as farm livestock, family pets, and so on.

RELATED OCCUPATIONS:

Physician
Public Health Veterinarian
Veterinary Attendant
Dentist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses

ADDITIONAL INFORMATION:

Veterinarians must have at least 6 years of specialized college training in a school of Veterinary Science. There are only 18 such university programs; thus, the competition for admittance demands above average high school grades. Veterinarians usually are employed in private practice, but there are some opportunities with research or governmental agencies. Personal characteristics desirable for Veterinarians are patience and liking animals, physical strength, and courage to handle frightened animals. Employment opportunities are expected to be good for the '70s. Salaries for beginning Veterinarians average $900 to $1,000 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

273

INDEX

SOCIAL/PERSONAL SERVICE

Page

AIRLINE STEWARDESS/STEWARD 1
ATTORNEY, see LAWYER . . . . .
BOX BOY, see COURTESY CLERK . . . . .
CHILD CARE WORKER 2
CITY PLANNING AIDE, see PLANNING AIDE . . . . .
CLERGYMAN 3
COLLEGE INSTRUCTOR 4
COOK/CHEF 5
COUNSELOR (School) 6
COUNTERCLERK (Cleaning and Laundry) 7
COURTESY CLERK (Box Boy) 8
CUSTODIAN 9
DEPUTY, see POLICEMAN . . . . .
DOMESTIC SERVICE WORKER 10
ELEMENTARY SCHOOL TEACHER 11
EMPLOYMENT CLERK, see PERSONNEL CLERK . . . . .
FRONT OFFICE CLERK (Hotel) 12
HOME ECONOMIST 13
HOTEL CLERK, see FRONT OFFICE CLERK (Hotel) . . . . .
HOTEL MANAGER 14
HOUSEHOLD WORKER, see DOMESTIC SERVICE WORKER . . . . .
JUVENILE OFFICER, see POLICEWOMAN . . . . .
    POLICEMAN . . . . .
    PROBATION OFFICER . . . . .
LAWYER 15
LIBRARIAN 16
LIBRARY ASSISTANT 17
MAID, GENERAL, see DOMESTIC SERVICE WORKER . . . . .
MAIL CARRIER 18

INDEX

SOCIAL/PERSONAL SERVICE

Page

MATRON, see POLICEWOMAN

PEACE CORPS VOLUNTEER . . . 19

PEACE OFFICER, see POLICEMAN

PERSONNEL CLERK . . . 20

PLANNING AIDE . . . 21

POLICEMAN . . . 22

POLICEWOMAN . . . 23

PROBATION OFFICER . . . 24

PSYCHOLOGIST (Clinical or School) . . . 25

RECREATION WORKER . . . 26

SECONDARY SCHOOL TEACHER . . . 27

SHERIFF, see POLICEMAN

SOCIAL SCIENTIST, see SOCIOLOGIST

SOCIAL WORKER . . . 28

SOCIOLOGIST . . . 29

TEACHER, see ELEMENTARY SCHOOL TEACHER
SECONDARY SCHOOL TEACHER
COLLEGE INSTRUCTOR

UNITED STATES AIR FORCE . . . 30

UNITED STATES ARMY . . . 31

UNITED STATES COAST GUARD . . . 32

UNITED STATES MARINE CORPS . . . 33

UNITED STATES NAVY . . . 34

URBAN PLANNER . . . 35

URBAN PLANNING AIDE, see PLANNING AIDE

VISTA VOLUNTEER . . . 36

WAITER/WAITRESS . . . 37

WOMEN IN THE ARMED FORCES . . . 38

AIRLINE STEWARDESS/STEWARD

JOB BRIEF

D.O.T. No: 352.878
D.O.T. Ref: Volume II, Page 507
Revision date: October 1973

THE JOB:

AIRLINE STEWARDESS/STEWARD: Stewardesses/Stewards are the personal link between the passenger and the airline. Their association with travelers is longer and closer than that of any other employee of the industry. They hold one of the most important public relations positions in the airline. Their job is to make the passengers' flight safe, comfortable and enjoyable.

RELATED OCCUPATIONS:

Hostess/Host
Purser
Travel Agent
Reservation Agent

JOB RELATED HIGH SCHOOL SUBJECTS:

Speech
English
Psychology
Home Economics
Foreign Languages
Food Service

ADDITIONAL INFORMATION:

Airline personnel recruiters stress "school activity" involvement for a person who is serious about entering this job. Despite the glamour associated with this occupation, the routine involved can become boring. A high school education and two years of college training is preferred by most airlines. Although requirements vary among airlines, generally one must be 5'2" to 5'9" in height with weight in proportion to height. A pleasing personality and ability to work with the public are essential characteristics. Starting salary is about $450 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

CHILD CARE WORKER

D.O.T. No: 359.878

D.O.T. Ref: Volume II, Page 479

Revision date: October 1973

THE JOB:

CHILD CARE WORKER: Child Care Workers may be employed in a variety of day-care schools, children's centers, and Head Start programs for children from 2 to 5 years of age. They organize and lead activities of prekindergarten children as volunteers or credentialed teacher-directors.

RELATED OCCUPATIONS:

Beach Lifeguard
Camp Counselor
Nurse's Aide
Peace Corps Volunteer
Recreation Worker

JOB RELATED HIGH SCHOOL SUBJECTS:

Recreation Leadership
Psychology
Art
Home Management
Child Care
Crafts

ADDITIONAL INFORMATION:

One may become a Child Care Worker directly out of high school. There are three main areas of day care: Head Start, licensed day care, and children's centers, each with its own qualifications. There is a screening process to determine sincerity in wanting to help children and ability to handle the responsibility. This field has been largely made up of volunteers. Paying positions are limited but are expected to grow. Salaries range from less than $2 to $6 an hour depending on experience and education.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

CLERGYMAN

JOB BRIEF

D.O.T. No: 120.108

D.O.T. Ref: Volume II, Page 296

Revision date: October 1973

THE JOB:

CLERGYMAN: Clergymen, also known as ministers, rabbis, chaplains, and priests, conduct religious ceremonies, provide spiritual guidance, and perform other functions associated with beliefs and practices of religions.

RELATED OCCUPATIONS:

Missionary
Social Worker
Teacher

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
English
Psychology
Social Studies
Speech

ADDITIONAL INFORMATION:

Preparation to be a Clergyman depends on the individual religion but usually involves education beyond high school. There are special schools devoted to the preparation of Clergymen. Personal characteristics desirable for Clergymen include a belief in the religion, interest and ability to work with people, and sympathy for people with problems. Salaries for Clergymen vary among religions and generally are low to average. Housing may be provided.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

COLLEGE INSTRUCTOR

JOB BRIEF

D.O.T. No: 090.228

D.O.T. Ref: Volume II, Page 341

Revision date: October 1973

THE JOB:

COLLEGE INSTRUCTOR: College Instructors teach students in classrooms, conduct and direct research, develop educational course material, write articles, books, and reports, and participate in college or university functions.

RELATED OCCUPATIONS:

Military Science Instructor
Secondary Teacher
Special Education Teacher

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses

ADDITIONAL INFORMATION:

College Instructors must have at least a master's degree and for most, a doctor's degree is required to teach in a college or university. Advancement from instructor to professorial ranking depends on education and experience. Employment opportunities for College Instructors are expected to be limited, except in the areas of mathematics and science in which there will be good opportunities during the '70s for persons with a doctor's degree. The increasing growth of community colleges and adult evening schools should provide opportunities for persons with a master's degree. Beginning salaries for College Instructors average $700 per month, with normal annual increases.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 313.131
D.O.T. Ref: Volume II, Page 299
Revision date: October 1973

THE JOB:

COOK/CHEF: Cooks and Chefs prepare meals. Some work in private homes, but most work in restaurants, hotels, hospitals, and institutions.

RELATED OCCUPATIONS:

Kitchen Helper
Short Order Cook
Fry Cook

JOB RELATED HIGH SCHOOL SUBJECTS:

Food Service
Nutrition

ADDITIONAL INFORMATION:

Applicants are not required to have a high school diploma at this time; however, this is in the process of changing. An apprenticeship for this occupation exists in some areas. An apprenticeship committee administers a general aptitude test to applicants. Upon completion of a 3-year apprenticeship, a graduate can advance to executive chef. One can also enter this field as a short order cook or kitchen helper. No formal requirements have been uniformly established. Training is available in some community colleges. Success depends on the individual's creativity. The demand for cooks at all levels should increase. This is a highly unionized occupation in some areas. Salaries range from $100 to $150 per week. Chefs in prestigious restaurants earn more than $1000 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

COUNSELOR (School)

JOB BRIEF

D.O.T. No: 045.108
D.O.T. Ref: Volume II, Page 296
Revision date: October 1973

THE JOB:

COUNSELOR (School): School Counselors, also known as guidance counselors or vocational counselors, assist students to plan educational and vocational choices according to the student's abilities and interests. Some School Counselors also provide assistance to students with problems related to family, friends, or school.

RELATED OCCUPATIONS:

- Social Worker
- Probation Officer
- Case Aide
- Rehabilitation Counselor
- Employment Counselor
- Teacher

JOB RELATED HIGH SCHOOL SUBJECTS:

- College Preparation Courses
- English
- Social Studies
- Psychology
- Speech

ADDITIONAL INFORMATION:

Most states require School Counselors to have a teaching credential, several years of teaching experience, and often a master's degree in school counseling. Most School Counselors work in public high schools but there is a trend toward more counseling in junior high and elementary schools. Employment opportunities are expected to be good and to increase for those interested in junior high or elementary school counseling. Salaries range from $660 to $930 per month and are higher for those School Counselors with a master's degree.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

COUNTERCLERK
(Cleaning and Laundry)

D.O.T. No: 369.887

D.O.T. Ref: Volume II, Page 360

Revision date: October 1973

THE JOB:

COUNTERCLERK (Cleaning and Laundry): Counterclerks receive clothing and other items from customers for cleaning and pressing. They receive payment and make change.

RELATED OCCUPATIONS:

Retail Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

General Mathematics

ADDITIONAL INFORMATION:

Experience is not required for this occupation; however, previous work experience involving clerical skills or public contact is helpful. Work is usually obtained through direct application to cleaning establishments, local cleaning associations, employment agencies, or newspaper job advertisements. Counterclerks should be personable, honest, neat in appearance, poised, possess good clerical and numerical skills, and have good penmanship. On-the-job training is provided. Union membership may be required. The salary range is from $110 to $130 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

282

COURTESY CLERK (Box Boy)

JOB BRIEF

D.O.T. No: 920.887

D.O.T. Ref: Volume II, Page 360

Revision date: October 1973

THE JOB:

COURTESY CLERK (Box Boy): Courtesy Clerks or Box Boys are employed in many grocery stores to put groceries in bags and assist customers in carrying them to their cars.

RELATED OCCUPATIONS:

Food Clerk
Dishwasher
Kitchen Helper
Warehouseman

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

Courtesy Clerks often work on a part-time basis while attending high school or college. There is varied on-the-job training. The job is usually not a career but may lead to a career in grocery store operations. Bookkeeping and other business courses will help those who intend to make a career of grocery work. Courtesy Clerks can expect at least 8 hours of work per week. They earn about $3.00 per hour in most stores.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

CUSTODIAN

JOB BRIEF

D.O.T. No: 382.884
D.O.T. Ref: Volume II, Page 322
Revision date: October 1973

THE JOB:

CUSTODIAN: Custodians are responsible for keeping buildings clean, sanitary, and orderly and for keeping heating and cooling systems operating correctly.

RELATED OCCUPATIONS:

Hospital Orderly
Janitor
Foreman
Laborer

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

An elementary education is required for this job. However, for better paying positions such as Civil Service, a high school education or its equivalent is strongly recommended. The Custodian must be able to read and write since they have to follow written instructions. An examination is given to applicants for Civil Service positions; however, private employers do not usually give examinations. Demand is not great; however, there are opportunities for qualified people. Starting salary range is $130 to $170 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

DOMESTIC SERVICE WORKER

JOB BRIEF

D.O.T. No: 303.138;304.887;306.878

D.O.T. Ref: Volume II, Pages 461, 360, 507

Revision date: October 1973

THE JOB:

DOMESTIC SERVICE WORKER: Domestic Service Workers perform such household chores as cooking, cleaning, and ironing. These workers include housekeepers, day workers, live-in and live-out maids, and mothers' helpers. They may do any task in the home from housecleaning to meal preparation.

RELATED OCCUPATIONS:

Custodian
Groundsman
Hospital Maid
Hospital Orderly
Nurse's Aide
Waiter/Waitress
Janitor

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

Formal training is a rarity in this field and there are no educational requirements. Neatness and reliability are important personal characteristics in this career. The demand for qualified Domestic Service Workers is usually greater than the supply of workers. Public and private employment agencies can supply prospective employers. Agencies cannot usually guarantee 40 hours of work every week; however 35 to 40 hour work weeks are available. Salaries usually range from $2.00 to $2.50 per hour, but some do make as high as $5.50 an hour.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

ELEMENTARY SCHOOL TEACHER

JOB BRIEF

D.O.T. No: 092.228

D.O.T. Ref: Volume II, Page 343

Revision date: October 1973

THE JOB:

ELEMENTARY SCHOOL TEACHER: Elementary School Teachers prepare and give lessons to children, give tests, assign grades, and perform related duties in grades kindergarten through sixth grade. (In some states the elementary program continues through the eighth grade.)

RELATED OCCUPATIONS:

Kindergarten Teacher
Handicapped Children Teacher
Early Childhood Teacher

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
General Mathematics
Psychology (Social)
Art
English
Music

ADDITIONAL INFORMATION:

Elementary School Teachers must obtain an elementary teaching credential requiring the completion of a bachelor's degree. In many states an additional year of college is required. Employment opportunities are decreasing for Elementary School Teachers but look favorable for those trained to teach children with special problems. Starting salaries for Elementary School Teachers average $720 per month but vary from region to region.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

FRONT OFFICE CLERK (Hotel)

JOB BRIEF

D.O.T. No: 242.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

FRONT OFFICE CLERK (Hotel): Front Office Clerks in hotels and motels include the Room, Desk, Key, Rack, and Reservations Clerks who deal with the public by telephone, mail or in person.

RELATED OCCUPATIONS:

Key Clerk
Mail Clerk
Bellman

JOB RELATED HIGH SCHOOL SUBJECTS:

Bookkeeping
Typing
Business Mathematics
English
Speech

ADDITIONAL INFORMATION:

A high school diploma or equivalent is usually required. This occupation requires high verbal skills, plus the ability to make decisions. Front Office Clerk is not generally an entry level job. A working knowledge of hotel procedure is necessary and on-the-job training is usually given. This job can lead to mid-management jobs, depending upon the amount of education, training and experience. Salaries range from $120 to $150 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 096.128
D.O.T. Ref: Volume II, Page 337
Revision date: October 1973

THE JOB:

HOME ECONOMIST: Home Economists develop and apply principles of homemaking to promote the health and welfare of individuals and families; to advise homemakers in the selection and use of household equipment, food and clothing; and to advise on consumer problems. Most Home Economists teach in high schools or colleges, but some are employed as researchers or testers for government, private industries, colleges and universities.

RELATED OCCUPATIONS:

County Home Demonstration Agent
Dietitian
Nutritionist
4-H Club Agent

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Consumer Home Economics
English
Science
Chemistry

ADDITIONAL INFORMATION:

A 4-year college program in home economics is the minimum requirement for employment as a Home Economist. More responsible entry level positions require a master's degree. The majority of Home Economists are employed as teachers; a smaller number are employed by governmental agencies and private firms. With the growing concern for consumer protection, employment opportunities for Home Economists appear to be good in schools and in private industry. Salaries range from $600 to $650 per month for beginning Home Economists.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

HOTEL MANAGER

D.O.T. No: 187.118

D.O.T. Ref: Volume II, Page 237

Revision date: October 1973

THE JOB:

HOTEL MANAGER: Hotel Managers direct hotel operations to serve patrons successfully. They are executives, coordinating the tasks of housekeeping, personnel, purchasing, publicity, maintenance, front office activities, and dining facilities. In a small hotel, the manager may perform front office clerical work.

RELATED OCCUPATIONS:

Credit Manager
Personnel Manager
Hospital Administrator
Front Office Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Business Mathematics
Business Education
English
Speech
Psychology

ADDITIONAL INFORMATION:

This is a rapidly growing occupation. The concentration of hotels in large metropolitan areas makes these important job centers for career-minded hotel men. Some community colleges offer hotel and restaurant operation programs. Many young people interested in this occupation begin as Bellmen where they can get a real feel for all the workings of a hotel. Tact, leadership, and organization are important aptitudes for the prospective Manager. Working hours range from 40 to 60 hours per week, and salaries from $220 to $400 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LAWYER

JOB BRIEF

D.O.T. No: 110.108
D.O.T. Ref: Volume II, Page 425
Revision date: October 1973

THE JOB:

LAWYER: Lawyers, also called Attorneys, work in law firms, large businesses, public agencies, or may be self-employed. They represent their clients in civil or criminal proceedings. Lawyers may specialize in certain areas of law, such as tax, criminal, patent, personal injury, or corporate law.

RELATED OCCUPATIONS:

Judge
Patent Agent
Labor Relations Mediator
Criminal Lawyer
Tax Lawyer
Patent Lawyer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Social Studies
Speech
English

ADDITIONAL INFORMATION:

Lawyers must possess a bachelor's degree in addition to a law school degree which usually requires 3 or 4 years schooling past the bachelor's degree. Lawyers must also pass a rigorous examination, the Bar Examination, before being allowed to practice law. Employment opportunities are expected to be good, especially for those in the top of the law school class. Salaries vary widely but beginning Lawyers usually earn at least $900 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LIBRARIAN

JOB BRIEF

D.O.T. No: 100.168
D.O.T. Ref: Volume II, Page 237
Revision date: October 1973

THE JOB:

LIBRARIAN: Librarians accession, check out, record, arrange, and make information available to large numbers of people. Librarians may handle books, films, periodicals, documents and other media to transmit information.

RELATED OCCUPATIONS:

Museum Curator
Library Assistant
Library Processor/Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
English
Foreign Language
Literature
Computer Technology
Library Practice

ADDITIONAL INFORMATION:

A bachelor's degree is the minimum educational requirement for employment as a Librarian while a master's degree in library science is becoming increasingly necessary. Librarians are employed by schools and universities, by public libraries and by specialized libraries such as medical and legal libraries. Employment opportunities are expected to be good for Librarians during the '70s. Starting salaries for Librarians range from $730 to $780 per month and are considerably higher for experienced Librarians and for those with a Ph.D degree.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

LIBRARY ASSISTANT

JOB BRIEF

D.O.T. No: 249.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

LIBRARY ASSISTANT: Library Assistants work under the direction of a professional librarian. They perform a wide variety of tasks in the library such as acquiring, cataloging, circulating, and maintaining library materials.

RELATED OCCUPATIONS:

Medical Record Librarian
Librarian

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)

English	History
Science	Typing
Foreign Language	Literature

ADDITIONAL INFORMATION:

High school graduation or its equivalent is usually required for the job of Library Assistant. Community college training is highly recommended. Community colleges offer courses in library technology. Working as a page or aide while attending school will provide some experience in this line of work. Training is given on the job. The turnover rate is not very high, and low budgets for libraries in many areas limit job opportunities. The assistant, with further education and experience, may advance to librarian. Salaries for a 40-hour week range from $120 to $150.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

MAIL CARRIER

JOB BRIEF

D.O.T. No: 233.388
D.O.T. Ref: Volume II, Page 276
Revision date: October 1973

THE JOB:

MAIL CARRIER: Mail Carriers are responsible for delivering and collecting the mail in a specific area to which they are assigned.

RELATED OCCUPATIONS:

Post Office Clerk
Driver Salesman (Routeman)
Parcel Post Clerk

JOB RELATED HIGH SCHOOL SUBJECTS:

Mathematics
English

ADDITIONAL INFORMATION:

There is no formal educational requirement for the job of Mail Carrier although a high school education or equivalent is generally preferred. Training in speed reading would be an asset. One must pass a written and physical Postal Service examination. A valid driver's license is also required. The normal work week consists of 40 hours but varies with seasons and locations. Salaries range from $150 to $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

293

JOB BRIEF

PEACE CORPS VOLUNTEER

D.O.T. No: None

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

PEACE CORPS VOLUNTEER: Peace Corps Volunteers assist people in underdeveloped countries in the development of modern skills in health, education, community planning and other fields required in the development of stable, modern societies.

RELATED OCCUPATIONS:

Vista Volunteer
Missionary
Social Worker
Child Day Work

Red Cross Work
YMCA, YWCA Service
Salvation Army
American Friends Field Service

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)

History
Foreign Language
Social Science

English
Industrial Arts
Mathematics

ADDITIONAL INFORMATION:

The Peace Corps is open to U.S. citizens 18 years of age or older. Volunteers need either a college degree or a definite and specific skill, such as auto mechanics, carpentry, agriculture, welding, etc. It is not necessary to speak a foreign language but one must pass a language-learning-ability test. The training program for those accepted is 12 to 14 weeks and covers language, cultural patterns and technical aspects of the countries to which one will be assigned. The tour of duty is 2 years and may be extended at the end of the first two years. The Peace Corps provides all transportation abroad and a moderate but comfortable standard of living. Living allowances range from $36 in Tonga to $160 in Libya with an average of $100 per month. In addition, $75 will be banked each month in the U.S. for the volunteer.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

PERSONNEL CLERK

D.O.T. No: 205.368

D.O.T. Ref: Volume II, Page 258

Revision date: October 1973

THE JOB:

PERSONNEL CLERK: Personnel Clerks compile and keep personnel records of employees. They may also operate calculating machines; administer and score aptitude, personality, and interest test; and prepare accident, injury, and insurance reports.

RELATED OCCUPATIONS:

Identification Clerk
Employment Clerk
Registration Clerk
Employment Interviewer

JOB RELATED HIGH SCHOOL SUBJECTS:

Office Practices
Business Machines
Speech

ADDITIONAL INFORMATION:

Usually high school commercial or business courses are sufficient for entry into this field; however, some companies may provide on-the-job training for promotion. Personal characteristics such as speaking ability, tactfulness, neat appearance, and a liking for public contact are important. Personnel clerks are employed in governmental agencies and in most large private firms. Employment opportunities are expected to increase in the '70s. Salaries usually start at $90 to $120 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 199.388

D.O.T. Ref: Volume II, Page 276

Revision date: October 1973

THE JOB:

PLANNING AIDE: Planning Aides compile data for use by urban planners whose goals are to develop well-ordered, attractive cities. Aides may make field surveys to determine how land is being used and make maps, charts, and reports which help the planners.

RELATED OCCUPATIONS:

Administrative Aide
Draftsman
Urban Planner

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Typing
Office Procedures
Mathematics
Social Studies
Drafting
Geography

ADDITIONAL INFORMATION:

High school graduation is the minimum requirement. Clerical skills, including typing and maintaining good reference files, are part of the job. Planning Aides, under supervision, perform technical research, mapping, layout and design on assigned programs and projects. For advancement to more skilled jobs, completion of 2 years of college plus 2 years of technical planning experience is required. Starting salary is about $160 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

POLICEMAN

JOB BRIEF

D.O.T. No: 375.268

D.O.T. Ref: Volume II, Page 416

Revision date: October 1973

THE JOB:

POLICEMAN: Policemen are charged with basic law enforcement duties. They keep peace and protect people and property.

RELATED OCCUPATIONS:

Detective
State Traffic Officer
Guard
Sheriff
Policewoman
Watchman

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Social Studies
Typing
Physical Education

ADDITIONAL INFORMATION:

High school graduation is the minimum educational requirement for Policemen. Most police departments recommend further education in law enforcement at a community or 4-year college. Military experience in traffic control and investigation is helpful in civilian police work. The minimum age requirement for a Policeman is usually 21 years, but some police departments have a cadet system for youths between the ages of 18 and 21. Policeman applicants must be of high moral character and have no adult police record. They also must pass a written and oral Civil Service test in most communities and a physical examination. Employment opportunities should be good in the '70s for those meeting the requirements. Salaries range from $210 to $260 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

POLICEWOMAN

JOB BRIEF

D.O.T. No: 375.268

D.O.T. Ref: Volume II, Page 416

Revision date: October 1973

THE JOB:

POLICEWOMAN: Policewomen are charged with keeping peace and protecting people and property in the city. They perform a narrower range of duties than do the policemen with whom they work.

RELATED OCCUPATIONS:

Detective
Laboratory Work
Probation and Parole Work
Social Service Work
Police Matron

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses (recommended)
Physical Education
Social Science
Typing

ADDITIONAL INFORMATION:

The minimum age requirement for a Policewoman is usually 21 years. High school graduation is necessary and a community college education with a major in police science is recommended. An employee also receives on-the-job training as a regular part of the job. Educational standards for women seeking careers in law enforcement are rising and are usually higher than those for men. Opportunities for Policewomen are increasing due to the growth of population, increasing crime, and greater specialization in police work. A Policewoman has diversified responsibilities, but she spends much of her time working with cases which involve women and children. Salaries range from $220 to $270 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

D.O.T. No: 195.108

D.O.T. Ref: Volume II, Page 296

Revision date: October 1973

THE JOB:

PROBATION OFFICER: Probation Officers work for juvenile or adult probation agencies investigating criminal offenses, preparing social histories, determining treatment plans. and evaluating progress of offenders.

RELATED OCCUPATIONS:

Social Worker
Policeman/Policewoman
Case Aide

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Social Studies

ADDITIONAL INFORMATION:

A bachelor's degree is necessary for employment as a Probation Officer and a master's degree is becoming desirable for most positions. Most Probation Officers work for a department within the adult or juvenile court and a Civil Service test is given for these jobs. Employment opportunities are good for the '70s, particularly for those with a master's degree. Starting salaries for Probation Officers begin at $690 per month and advance according to experience and promotion.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

PSYCHOLOGIST (Clinical or School)

D.O.T. No: 045.088

D.O.T. Ref: Volume II, Page 294

Revision date: October 1973

THE JOB:

PSYCHOLOGIST (Clinical or School): Psychologists study the nature and causes of human behavior, individual differences, and learning patterns. They may administer tests to determine disabilities and difficulties of students and others. They may specialize in educational measurement, school adjustment, learning or special education. They may engage in research or individual and group counseling.

RELATED OCCUPATIONS:

Psychometrist
Psychiatrist
Psychologist (Educational)
School Counselor

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses

ADDITIONAL INFORMATION:

Psychologists should have at least a master's degree; however, a doctor's degree is very desirable. Employment opportunities are good. Psychologist may work some irregular hours but many have regularly scheduled hours, especially when working in a school or clinic situation. Starting salaries for Psychologists having a master's degree averaged about $9,600 in 1970. Beginning salaries for those having the doctorate degree averaged $10,900. Salaries vary according to employer and experience. Self-employed Psychologists generally have higher incomes than salaried ones.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

RECREATION WORKER

D.O.T. No: 195.228

D.O.T. Ref: Volume II, Page 345

Revision date: October 1973

THE JOB:

RECREATION WORKER: Group Recreation Workers are employed by communities and private organizations in recreational planning, instruction, coordination, and supervision. Duties vary widely from simple play supervision to broad community recreation planning.

RELATED OCCUPATIONS:

Camp Counselor
Child Care Day Worker
Recreation Center Director
Physical Education Instructor
Boy Scout Leader
Girl Scout Leader
Hospital Recreation Leader
Armed Services Recreation Leader
Program Aide

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Sports
Health
Crafts
Biology
First Aid
Drama
Art
Speech
Social Sciences
Recreation Leadership

ADDITIONAL INFORMATION:

Those interested in a job as Recreation Worker should have 4 years of college. Part-time work is available for college students during the summer. Future prospects in recreation are very good. Opportunities for employment are in city and county recreation departments, the federal park department, and private groups such as Boy or Girl Scouts, YWCA or YMCA. Part-time work involves 15 to 25 hours per week, paying from $25 to $65 weekly. Full-time salaries range from $140 to $260 per week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SECONDARY SCHOOL TEACHER

JOB BRIEF

D.O.T. No: 091.228

D.O.T. Ref: Volume II, Page 341

Revision date: October 1973

THE JOB:

SECONDARY SCHOOL TEACHER: Secondary School Teachers prepare and give instruction in one or more subjects to students in grades 7 through 12. Related duties include giving tests, assigning grades, developing curriculum, attending meetings, maintaining discipline, and counseling students.

RELATED OCCUPATIONS:

School Counselor
Special Education Teacher
Recreation Leader

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Speech

ADDITIONAL INFORMATION:

A bachelor's degree and in some states a fifth year of college education plus a valid teaching credential are necessary for employment as a Secondary School Teacher. Employment opportunities are expected to be limited due to a surplus of teachers and decreasing school enrollments and budgets. However, there will be openings for special education teachers such as teachers of mentally retarded or physically handicapped children. Average starting salaries for Secondary School Teachers are $720 per month. Teachers usually work a 10-month year.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SOCIAL WORKER

JOB BRIEF

D.O.T. No: 195.108

D.O.T. Ref: Volume II, Page 296

Revision date: October 1973

THE JOB:

SOCIAL WORKER: Social Workers administer financial assistance and provide counseling and casework services to persons with family or financial problems. They are employed by public agencies or private social service agencies. Social Workers may specialize by working with certain groups of people, such as children, elderly, or welfare families.

RELATED OCCUPATIONS:

School Counselor
Psychologist
Probation Officer
Case Aide

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses
Social Studies
Typing

ADDITIONAL INFORMATION:

The minimum education necessary for Social Workers is a bachelor's degree. However, a master's of social work (MSW) is rapidly becoming necessary for entry level positions. Most social work jobs are obtained by passing a Civil Service examination. Personal characteristics of emotional stability, caring for the welfare of others, and ability to communicate are important for Social Workers. Employment opportunities are expected to be good during the '70s especially for those with an MSW degree. Starting salaries for Social Workers range from $670 for those with a bachelor's degree to $840 per month for holders of an MSW degree.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

SOCIOLOGIST

JOB BRIEF

D.O.T. No: 054.088

D.O.T. Ref: Volume II, Page 294

Revision date: October 1973

THE JOB:

SOCIOLOGIST: Sociologists are professional researchers dealing with human affairs, studying such things as the cultural patterns of ethnic minorities, social classes, and social change. There are specialized Sociologists--Criminologists, Urban Sociologists, Rural Sociologists, etc. Most Sociologists are college or university professors and/or conduct research.

RELATED OCCUPATIONS:

Political Scientist
Psychologist
Economist
Anthropologist

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparation Courses

ADDITIONAL INFORMATION:

A master's degree in sociology is the minimum requirement for employment as a Sociologist, but most Sociologists possess a Ph.D. degree which is usually necessary for employment in a college or university. Employment outlook for Sociologists with a Ph.D. or solid training in statistical analysis is good for the '70s. Sociologists with a master's degree will have limited employment opportunities. Salaries of Sociologists employed by the federal government range from $890 for entry level Sociologists to $1,770 per month for experienced Sociologists.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

UNITED STATES AIR FORCE

D.O.T. No: 378.999

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

UNITED STATES AIR FORCE: The United States Air Force has the primary mission of organizing, training, and equipping Air Force units for prompt and sustained offensive and defensive operations. The Air Force defends the United States against aerospace attack and controls vital aerospace areas.

RELATED OCCUPATIONS:

United States Navy
United States Army
United States Marines
United States Coast Guard

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

High school graduation is required by the United States Air Force. Basic training in the Air Force is 6 weeks and includes Air Force organization, airman career advancement, basic survival training, physical conditioning, and nuclear, biological and chemical warfare survival. Weapons and marksmanship training are given. Following basic training, the new airman is sent to a technical school or base that corresponds to his career aptitude, personal desires, and the needs of the Air Force for further career development. Other programs offered by the Air Force include Air Force Reserves and Air Force Academy. Opportunities are excellent for new members with starting salaries approximately $330 per month, plus additional benefits such as housing and medical.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

UNITED STATES ARMY

JOB BRIEF

D.O.T. No: 378.999

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

UNITED STATES ARMY: The United States Army is responsible for the preparation of necessary land forces for effective conduct of offensive and defensive land based military operations. They may also serve as protective units for the maintenance of peace.

RELATED OCCUPATIONS:

United States Marines
United States Navy
United States Air Force
United States Coast Guard

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

High school graduation is preferred but programs are offered for any level of education or experience. Basic combat training takes 8 weeks and is designed to develop a disciplined, motivated soldier who is qualified in basic weaponry, is in excellent physical condition, and is well drilled in the fundamentals of soldiery. Other programs offered by the army include Army Reserve, Military Academy at West Point, Army ROTC (Reserve Officers Training Corps), and Army OCS (Officers' Candidate School). Opportunities are unlimited because large numbers of people are needed to carry out the army's operations. Starting salaries for enlistees are approximately $330 per month, plus support benefits such as housing and medical.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

UNITED STATES COAST GUARD

JOB BRIEF

D.O.T. No: 378.999

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

UNITED STATES COAST GUARD: The basic duty of the United States Coast Guard is to enforce or to help enforce federal laws on the high seas and waters subject to the jurisdiction of the United States. The Coast Guard maintains navigation aids, keeps track of icebergs, operates lighthouses, studies the weather, keeps ports secure, and performs emergency work.

RELATED OCCUPATIONS:

United States Navy
United States Army
United States Air Force
United States Marine Corps

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

High school graduation is preferred prior to enlisting in the Coast Guard. While on duty guardsmen are encouraged to continue their education. Basic training takes 9 weeks and includes physical fitness, military drill, seamanship, communications, character education, citizenship, and nuclear, biological and chemical warfare defense. Other programs offered by the Coast Guard include Coast Guard Reserves, Coast Guard Academy, Officer's Candidate Program and Aviation Cadet Program. Entrance into these programs is determined by age, education, and related experiences. Salaries vary greatly depending on rank and length of service. Starting salary is approximately $330 per month. Additional benefits such as housing and medical are provided.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

UNITED STATES MARINE CORPS

JOB BRIEF

D.O.T. No: 378.999

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

UNITED STATES MARINE CORPS: The United States Marine Corps is trained and equipped to provide Fleet Marine Forces of combined arms and supporting air components to seize or defend advanced naval bases. They conduct land operations that may be essential to a successful naval campaign.

RELATED OCCUPATIONS:

United States Coast Guard
United States Navy
United States Army
United States Air Force

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

High school graduation is preferred but not always necessary for enlistment in the United States Marine Corps. Basic training lasts from one month to a year depending on the complexity of the training. Specialized training could include a foreign language, electronic maintenance, and aircraft maintenance. Other programs offered by the Marine Corps are Marine Corps Reserve, Navy Academy, Navy ROTC, Platoon Leaders Class, Marine Corps Office Candidate School and Aviation Candidate School. Salaries range according to rank and length of service. The salary per month is approximately $330 for a new enlistee. Additional benefits such as housing and medical are provide

---

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

UNITED STATES NAVY

JOB BRIEF

D.O.T. No: 378.999

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

UNITED STATES NAVY: The United States Navy trains and equips forces to conduct prompt and sustained combat operations at sea, including operation of sea-based aircraft and land-based naval components. The Navy gains and controls general naval supremacy and conducts such operations as may be essential to the prosecution of a naval or land campaign.

RELATED OCCUPATIONS:

United States Coast Guard
United States Marines
United States Army
United States Air Force

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

High school graduation is preferred but not always necessary prior to enlistment in the United States Navy. Basic training is a minimum of 8 weeks and includes such subject areas as navigation, naval gunnery, and survival at sea. Following basic training, qualified individuals are able to attend the service school of their choice or are assigned to sea or shore duty for on-the-job training. Opportunities are unlimited in the navy because large numbers of people are needed to carry out the navy's operations. Other programs are the Naval Reserve, Officer's Candidate School, and the Naval Academy at Annapolis. Salaries vary greatly according to rank and length of service. Starting pay per month is approximately $330 plus benefits such as housing and medical.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

URBAN PLANNER

JOB BRIEF

D.O.T. No: 199.168

D.O.T. Ref: Volume II, Page 237

Revision date: October 1973

THE JOB:

URBAN PLANNER: Urban Planners help cities grow in an orderly fashion by working with city or county elected officials to develop a general plan for the future. Urban Planners compile and analyze data on economic, social, and physical factors affecting land use, transportation, open space, air and water pollution, and other urban problems.

RELATED OCCUPATIONS:

Business Manager
City Manager
Director of Social Welfare
Architect
Engineer

JOB RELATED HIGH SCHOOL SUBJECTS:

College Preparatory Courses

ADDITIONAL INFORMATION:

The minimum educational requirement is a bachelor's degree in planning or public administration or the social sciences, with a concentration in city and urban planning. A master's degree is desirable. Urban Planners are employed by city, county, or state governments and sometimes by private consulting firms. Usually a Civil Service examination is given for employment in a governmental agency. Employment opportunities are expected to be excellent through the '70s. The normal starting salary for Urban Planners is $750 per month.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

JOB BRIEF

VISTA VOLUNTEER

D.O.T. No: None

D.O.T. Ref: None

Revision date: October 1973

THE JOB:

VISTA VOLUNTEER: Vista Volunteers provide technical or specialized support to economically depressed persons, groups, or communities in the improvement of sociological, economical, and physical living conditions. VISTA assignments may be rural or urban and are limited to the U.S. Areas of work are in health, economic development, education and manpower, housing, community planning, and social services.

RELATED OCCUPATIONS:

Social Worker
Red Cross Worker

JOB RELATED HIGH SCHOOL SUBJECTS:

History
Foreign Language (regional)
Social Science
English

ADDITIONAL INFORMATION:

Volunteers in Service to America (VISTA) is open to U.S. citizens--minimum age is 18 years. Generally VISTA requires a college degree or some special skill. It is helpful to know regional languages such as Spanish. The orientation program is 3 to 5 weeks. The assignment is one year in duration and may be extended for longer periods. Volunteers most often live in the community being served. Living allowances vary regionally, ranging from $200 to $280 per month. A stipend of $600 is held aside until completion of duty. Some travel or moving expenses are provided by VISTA.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.

2.

WAITER/WAITRESS

JOB BRIEF

D.O.T. No: 311.878

D.O.T. Ref: Volume II, Page 507

Revision date: October 1973

THE JOB:

WAITER/WAITRESS: Waiters and Waitresses have the basic task of serving food and beverages to customers in hotels and eating establishments.

RELATED OCCUPATIONS:

Bus Boy
Cashier
Bellman

JOB RELATED HIGH SCHOOL SUBJECTS:

Basic Mathematics
Home Economics

ADDITIONAL INFORMATION:

Advancement in this occupation is based on experience. It is interesting to note that salary is usually less in restaurants where there is opportunity for larger tips. It is difficult to obtain employment in the better restaurants unless the applicant is over 20. One can enter this occupation as a bus boy. Salaries start at about $2.00 per hour for bus boys and $1.75 for Waitresses. Experienced Waiters and Waitresses receive $70 to $100 per week plus tips varying from a few dollars to $100 a week.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.

JOB BRIEF

WOMEN IN THE ARMED FORCES
D.O.T. No: 378.999
D.O.T. Ref: None
Revision date: October 1973

THE JOB:

WOMEN IN THE ARMED FORCES: Women first began to enlist in the armed services in World War II. Women today have 4 services available to them: Women's Army Corps (WAC), Women's Air Force (WAF), Women of the Navy (WON), and the Women's Marine Corps.

RELATED OCCUPATIONS:

JOB RELATED HIGH SCHOOL SUBJECTS:

None Required

ADDITIONAL INFORMATION:

High school graduation is required by the WAFs and is preferred by the other 3 services. Basic training varies in length, usually 6 to 9 weeks, but is dependent upon the service. It includes classroom instruction, physical conditioning, marching, study and relaxation. Duty assignments are made according to basic training performance, aptitude and interest, and needs of the service. Career programs in the service cover many fields, such as engineering, nursing, and photography. Opportunities are unlimited. Salaries vary according to rank and length of service but starting salaries for new recruits are approximately $330 per month. Additional benefits such as housing and medical are provided.

Community Contacts and Other Sources of Information: Community contacts noted below should be made through the counselor.

1.
2.